Chapter 27. Asbestos-Containing Materials (ACM) in Schools and State Buildings

§2701. Asbestos-Containing Materials (ACM) in Schools and State Buildings

A. Purpose. The purpose of this Chapter is to provide for the identification, management, and abatement of asbestoscontaining materials in schools and state buildings that may pose an unreasonable risk to students, school personnel, and the public.

B. Applicability

- 1. The provisions of this Chapter apply to all local education agencies and the state government as defined in LAC 33:III.2703.
- 2. Except for the requirement to submit Form AAC-8 pursuant to LAC 33:III.2723.A, state buildings built after 1978 are exempt from the requirements of this Chapter if:
- a. the state building is not used as a school building for the education of grades kindergarten through post-graduate; or
- b. the state building does not contain asbestos as determined through review and approval of the Office of Environmental Services prior to occupancy of the building by:
- i. a signed statement(s) of no asbestos in construction as defined in LAC 33:III.2703.A that addresses the entire building, and all additions and renovations; or
- ii. an inspection report submitted in accordance with LAC 33:III.2707 as a result of an inspection stating that no asbestos is contained in, or on the outside of the state building, together with signed statement(s) of no asbestos in construction that address all additions and renovations conducted after the inspection; and
- c. a copy of the department approval of any documents submitted pursuant to Subparagraph B.2.a. of this Subsection shall be maintained at the administrative office of the building.
- 3. Except for the requirement to submit Form AAC-8 pursuant to LAC 33:III.2723.A, state buildings built prior to 1979 are exempt from the requirements of this Chapter provided that:
- a. the building is not used as a school building for the education of grades kindergarten through post-graduate;
- b. prior to occupancy, the department reviews and approves documentation of one of the following:
- i. the complete renovation of the state building after January 1, 1979 that complied with the following:
- (a). an inspection conducted during the renovation that showed that all ACM was removed from the inside and the outside of the building; and

- (b). no asbestos containing material was added in the renovations as documented by signed statement(s) of no asbestos in construction; or
- ii. an inspection conducted in accordance with LAC 33:III.2707.A reveals that no asbestos is contained in or on the outside of the state building; and
- c. no asbestos containing materials were added to the building subsequent to the inspection conducted pursuant to Clause B.3.b.i of this Section or the renovation conducted in accordance with Clause B.3.b.ii of this Section as documented by signed statement(s) of no asbestos in construction;
- d. a copy of the documentation submitted pursuant to Subparagraphs B.3.b and c of this Section shall be submitted to the Office of Environmental Services; and
- e. a copy of the documentation submitted pursuant to Subparagraphs B.3.b and c of this Section and department approval shall be maintained at the building administrative office.

C. Scope

- 1. This regulation requires local education agencies and the state government to identify friable and nonfriable ACM in schools and state buildings by visually inspecting schools and state buildings for such materials, sampling such materials if they are not assumed to be ACM, and having samples analyzed by appropriate techniques referred to in this Rule. The regulation requires local education agencies and the state government to submit management plans to the Office of Environmental Services at least 30 days prior to occupancy of any school or state building, and implement the plan within 180 days after occupancy.
- 2. If an exemption is requested for a state building that contains no asbestos, a determination supporting that exemption shall be submitted in accordance with Subparagraph B.2.b or 3.b of this Section.
- 3. Management plans submitted to and approved by the Department of Environmental Quality shall meet the inspection and assessment requirements of this Chapter.
- 4. In addition, local education agencies and the state government are required to employ persons who have been accredited to conduct inspections, reinspections, develop management plans, or perform response actions including the design of those actions.
- 5. The regulation also includes recordkeeping requirements.
- 6. Local education agencies and the state government may contractually delegate their duties under this Rule, but they remain responsible for the proper performance of those duties.
- 7. Local education agencies and the state government are encouraged to consult with the Office of Environmental Compliance of the Department of Environmental Quality for assistance in complying with this Rule.

8. Local education agencies and the state government shall provide for the transportation and disposal of asbestos in accordance with provisions of LAC 33:III.Chapter 51, Subchapter M.

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§2703. Definitions

A. The terms used in this Chapter are defined in LAC 33:III.111 and LAC 33:III.5151.B of these regulations with the exception of those terms specifically defined in this Section as follows.

Accessible—when referring to asbestos-containing material, material that is subject to disturbance by school or state building occupants or custodial or maintenance personnel in the course of their normal activities.

Accredited or Accreditation—when referring to a person, accreditation by the Department of Environmental Quality under the provisions of LAC 33:III.2799 and when referring to a laboratory, accreditation under the provisions of LAC 33:I, Subpart 3, Chapters 45-59.

Act—the Louisiana Asbestos Abatement Act.

Agent—any individual or entity (i.e., architect, industrial hygienist, consultant, etc.) who plans, executes, and/or monitors an asbestos project.

Air Erosion—the passage of air over friable asbestoscontaining building material which may result in the release of asbestos fibers.

Asbestos—the asbestiform varieties of Chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite-grunerite), anthophyllite, tremolite, and actinolite.

Asbestos Abatement Entity (AAE)—any individual, partnership, firm, association, corporation, sole proprietorship or other business concern, as well as any governmental, religious or social organization, or union with one or more employees or members involved in asbestos projects.

Asbestos-Containing Building Material (ACBM)—surfacing ACM, thermal system insulation ACM, or miscellaneous ACM in or on interior structural members or other parts of a school or state building.

Asbestos-Containing Material (ACM)—when referring to schools or state buildings, any material or product which contains more than 1 percent asbestos as determined by

using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy.

Asbestos Debris—pieces of ACBM that can be identified by color, texture, or composition, or dust, if the dust is determined by an accredited inspector to be ACM.

Category I Nonfriable ACM—asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Category II Nonfriable ACM—any material, excluding category I nonfriable ACM, containing more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Damaged Floor Covering that Contains ACM—resilient floor covering or the mastic used to attach it to the floor surface that contains ACM which has deteriorated or sustained physical impact such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering or crumbling of the ACM surface; water damage; significant or repeated water stains; scrapes, gouges, or mars; or other signs of physical impact on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged Friable Miscellaneous ACM—friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering or crumbling of the ACM surface; water damage; significant or repeated water stains; scrapes, gouges, or mars; or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged Friable Surfacing ACM—friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; flaking, blistering, or crumbling of the ACM surface by water damage; significant or repeated water stains; scrapes, gouges, or mars; or other signs of physical

injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged or Significantly Damaged Thermal System Insulation ACM—thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, or the ACM is crushed, water stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges, or other signs of physical injury to ACM, occasional water damage on the protective coverings/jackets, or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

Encapsulation—the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers by the encapsulant creating a membrane over the surface (bridging encapsulant) or penetrating the material and binding its components together (penetrating encapsulant).

Enclosure—an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.

Facility Component—any part of a facility, including equipment, that is under the control of a local education agency or the state.

Fiber Release Episode—any uncontrolled or unintentional disturbance of ACBM.

Friable—when referring to material in a school or state building, material that when dry may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

Friable Asbestos-Containing Building Material (ACBM)—any friable ACM that is in or on interior structural members or other parts of a school or state building.

Friable Asbestos-Containing Material (ACM)—any material containing more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy, which has been applied on ceilings, walls, structural members, piping, duct work, or any other part of the building, which when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), the asbestos content can be verified by point counting using PLM or assume the amount to be greater than 1 percent and treat the material as ACM.

Functional Space—a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, or hallway(s),

designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

Guest Instructor—an individual with expertise in a specific non-asbestos field who is designated by the RATP or principal trainer to provide instruction specific to certain course topics (i.e., law, medicine, etc.).

High-Efficiency Particulate Air (HEPA)—refers to a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles $0.3~\mu m$ in diameter or larger.

Homogeneous Area—an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

Inspection—any activity undertaken in a school building, or a state building, to determine the presence or location, or to assess the condition of friable or nonfriable asbestos-containing material (ACM), whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and nonfriable known or assumed ACM which has been previously identified. The term does not include the following:

- a. periodic surveillance of the type described in LAC 33:III.2721.B solely for the purpose of recording or reporting a change in the condition of known or assumed ACBM;
- b. inspections performed by employees or agents of federal, state, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or
- c. visual inspections of the type described in LAC 33:III.2717.J solely for the purpose of determining completion of response actions.

Local Education Agency—

- a. a public board of education or other authority legally constituted within Louisiana for either administrative control or direction of, or to perform a service function for, public or private; profit or nonprofit; day, night, or residential schools; elementary or secondary schools, colleges, graduate, medical, dental, or post-graduate education institutions;
- b. the governing authority of any elementary or secondary school, college, or post-graduate education institution.

Major Fiber Release Episode—any uncontrolled or unintentional disturbance of ACBM, which involves the falling or dislodging of more than 3 square or linear feet of friable ACBM.

Minor Fiber Release Episode—any uncontrolled or unintentional disturbance of ACBM, which involves the falling or dislodging of 3 square or linear feet or less of friable ACBM.

Miscellaneous ACM—miscellaneous material that is ACM in a school or state building.

Miscellaneous Material—interior building material in structural components, structural members, or fixtures, such as floor and ceiling tiles, not including surfacing material or thermal system insulation.

Nonfriable—material in a school or state building that when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

Operations and Maintenance Program (O and M)—a program of work practices to maintain regulated ACM in good condition, ensure cleanup of asbestos fibers previously released, and prevent further release by minimizing and controlling disturbance or damage of regulated ACM.

Potential Damage—refers to circumstances in which:

- a. friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities;
- b. there are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

Potential Significant Damage—refers to circumstances in which:

- a. friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities;
- b. there are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage;
- c. the material is subject to major or continuing disturbance due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

Preventive Measures—actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.

Principal Trainer—the trainers recognized by the department and identified by the RATP in its application for recognition to provide instruction in asbestos training courses (e.g., inspector, etc.).

Recognized Asbestos Training Provider (RATP)—a person or organization recognized by the department, to provide training related to asbestos activities conducted in Louisiana.

Regulated Asbestos-Containing Material (RACM)—

a. friable asbestos material;

- b. category I and II nonfriable ACM that has become friable such as asbestos-cement material that is not removed from a facility prior to demolition;
- c. category I and II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, ground, sanded, cut, abraded, or reduced to powder by the forces that have acted or are expected to act on the material in the course of demolition or renovation operations; or
- d. resilient floor covering or the asbestos-containing mastic used to attach it to the floor surface that is scraped, sanded, abraded, bead blasted, cut, ground, crumbled, pulverized, or reduced to powder by any means, including hand and mechanical equipment. This definition does not include resilient floor covering removed by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact (minor tears or minor breakage is acceptable where, for all intents and purposes, the flooring is considered whole) or asbestos-containing mastic that has been removed by chemical or other means that results in the asbestos fibers in ACWM being bound within a macro substrate and cannot reasonably become airborne unless further forces are applied.

Related Scientific Field—animal science, biological sciences, chemistry, geosciences, atmospheric sciences, soil sciences, physical geography, physics, health sciences, toxicology, environmental sciences, wildlife and fisheries sciences, engineering, nuclear science, agronomy, forestry, health physics, medical physics, or statistics and quantitative methods.

Removal—the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school or state building.

Repair—to return damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

Resilient Floor Covering—asbestos-containing floor tiles, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent asbestos as determined by using polarized light microscopy according to the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy.

Response Action—a method, including removal, encapsulation, enclosure, repair, operations, and maintenance, that protects human health and the environment from regulated ACM.

Responsible Official—

- a. for a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation;
- b. for a partnership or sole proprietorship: a general partner or the proprietor, respectively. If a general partner is a corporation, the provisions of Subparagraph a of this definition apply; or

c. for a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this definition, a principal executive officer of a federal agency includes the chief executive officer having a responsibility for the overall operations of a principal geographic unit of the agency.

Routine Maintenance Area—an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

School—any profit or nonprofit; public or private; day, night, or residential school that provides elementary, including head start and pre-K programs located on elementary school campuses, secondary, college, graduate, medical, dental, or post-graduate education, as determined under state law, or any school of any agency of the United States. Schools do not include locations where the primary purpose is not the education of students, but that provide for internships or other on the job training.

School Building—

- a. structures used for instruction, including classrooms, laboratories, libraries, research facilities, and administrative facilities;
 - b. school eating facilities and kitchens;
- c. gymnasiums or other facilities used for athletic or recreational activities, or for courses in physical education;
- d. dormitories or other living areas of residential schools;
- e. maintenance, storage, administrative, or utility facilities including hallways used in the operation of the facilities described in this definition; and
- f. any exterior structure, portico or covered exterior hallway or walkway and any exterior portion of a mechanical system used to condition interior space.

Significantly Damaged Floor Covering that Contains ACM—damaged floor covering that contains ACM where the damage is extensive and severe.

Significantly Damaged Friable Surfacing ACM—damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

Small-Scale, Short-Duration Activities (SSSD)—tasks that involve less than or equal to 3 square feet or 3 linear feet of ACM.

State Building—a building, or portion thereof, owned, used, or leased by the state of Louisiana. If the state does not own, lease, occupy, or use the entire building, the *state building* shall be only:

- a. that portion of the building, owned, leased, occupied, or used by the state;
- b. facility components as defined in LAC 33:III.2703;

- c. work areas, kitchens, restrooms, and other common areas that are co-owned, leased, or used by the state together with others; and
- d. any other portion of the building that shares a common heating, ventilation, and air conditioning (HVAC) system or common ingress/egress points with that portion of the building owned, leased, occupied or used by the state.

State Government—the state of Louisiana and any state agency as defined in R.S. 13:5102 that owns, leases, occupies, or uses the state building.

State of Louisiana or State—the state of Louisiana or any state agency as defined in R.S. 13:5102.

Statement(s) of No Asbestos in Construction—

- a. a signed written statement, by an architect, project engineer, or other principal responsible for the construction or renovation of the building, or a portion thereof, that no ACM was specified as a building material in the applicable construction documents for the building, or portion thereof (multiple signatures may be necessary to address the entire building); or
- b. a signed written statement by an accredited asbestos inspector who has conducted a thorough review of documents related to the construction or renovation of the building that no ACM was specified as a building material in the construction documents for the building, including all subsequent additions or renovations.

Surfacing ACM—surfacing material that is ACM.

Surfacing Material—material in a school or state building that is sprayed on, troweled on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Thermal System Insulation—material in a school or state building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

Thermal System Insulation ACM—thermal system insulation that is ACM.

Training Hour—at least 50 minutes of actual teaching including, but not limited to, time devoted to lecture, learning activities, small group activities, demonstrations, evaluations, and/or hands-on experience.

Training Manager—the individual responsible for administering a training program and monitoring the performance of the principal trainers and guest instructors; either serves as the signatory for training certificates or may designate other responsible individuals in the organization, or trainers as signatories.

Vibration—the periodic motion of friable ACBM which may result in the release of asbestos fibers.

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§2705. General Local Education Agency, State, or Local Government Responsibilities

A. Each local education agency or the state government shall:

- 1. ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance; develop and update management plans; and develop and implement response actions, including operations and maintenance, are carried out in accordance with this Chapter;
- 2. ensure that all custodial and maintenance employees are properly trained as required by this Chapter and other applicable federal and/or state regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable state regulations);
- 3. ensure that workers and building occupants, or their legal guardians, are informed at least once each year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress;
- 4. ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school or state building are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM;
- 5. ensure that warning labels are posted in accordance with LAC 33:III.2727;
- 6. ensure that management plans are available for inspection and that notification of such availability has been provided as specified in the management plan under LAC 33:III.2723.F;
- 7. designate a person to ensure that requirements under this Section are properly implemented;
- 8. ensure that the person designated under Paragraph A.7 of this Section receives training from a recognized instructor qualified to provide training to perform duties assigned under this Section. Such training shall provide, as necessary, basic knowledge of:
 - a. health effects of asbestos;
- b. detection, identification, and assessment of ACM;
 - c. options for controlling ACBM;
 - d. asbestos management programs; and

- e. relevant federal and state regulations concerning asbestos, including those in this Chapter, in Subchapter M of LAC 33:III.Chapter 51, and those of the Occupational Safety and Health Administration, U.S. Department of Labor, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency;
- 9. consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under this Section.
- B. The requirements of this Chapter in no way supersede the worker protection and work practice requirements under 29 CFR 1910.1001 (Occupational Safety and Health Administration [OSHA] asbestos worker protection standards for general industry), 1926.1101 (OSHA asbestos worker protection standards for construction), 40 CFR part 763, subpart G (EPA asbestos worker protection standards for public employees), LAC 33:III.2799, Appendix A, and LAC 33:III.Chapter 51, Subchapter M.

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§2707. Inspection and Reinspections

A. Inspection

- 1. Except as provided in LAC 33:III.2701.B.2 and 3, and LAC 33:III.2735, each local education agency and the state government shall inspect each school or state building that they lease, own, occupy, or use to identify all locations of friable and nonfriable ACBM as specified in this Section and LAC 33:III.2701.C.1.
- 2. Any building leased or acquired that is to be used as a school or state building shall be inspected as described under Paragraphs A.3, 4, and 5 of this Section prior to use as a school or state building.
- 3. In the event that emergency use of an uninspected building as a school or state building is necessitated, such buildings shall be inspected within 30 days after the decision to use them.
- 4. Each inspection of a school or state building shall be made by an accredited inspector.
- 5. For each area of a school or state building, except as excluded under LAC 33:III.2735, each person performing an inspection shall:
- a. visually inspect the area to identify the locations of all suspected ACM;
- b. touch all suspected ACM to determine whether it is friable:
- c. identify all homogeneous areas of friable suspected ACM and all homogeneous areas of nonfriable suspected ACM;

- d. assume that some or all of the homogeneous areas are ACM, and for each homogeneous area that is not assumed to be ACM, collect and submit for analysis bulk samples under LAC 33:III.2709 and 2711;
- e. assess, under LAC 33:III.2713, friable material in areas where samples are collected, friable material in areas that are assumed to be ACM, and friable ACM identified during a previous inspection; and
- f. prepare a report that includes the necessary information and submit to the person designated under LAC 33:III.2705 a copy of such report for inclusion in the management plan within 30 days of the inspection. The report shall include:
- i. the date of the inspection signed by each accredited person making the inspection, and a copy of each inspector's accreditation certificate current at the time of inspection;
- ii. an inventory of the locations of the homogeneous areas where samples were collected, exact locations where each bulk sample is collected, dates that samples are collected, homogeneous areas where friable suspected ACBM is assumed to be ACM, and homogeneous areas where nonfriable suspected ACBM is assumed to be ACM;
- iii. a description of the manner used to determine sampling locations, and the name and signature of each accredited inspector who collected the samples and a copy of the inspector's accreditation certificate current at the time of inspection;
- iv. a list of whether the homogeneous areas identified under Subparagraph A.5.d of this Section are surfacing material, thermal system insulation, or miscellaneous material; and
- v. assessments made of friable material pursuant to Subparagraph A.5.e of this Section, the names and signatures of all accredited inspectors making the assessment, and a copy of the inspector's accreditation certificate current at the time of inspection.

B. Reinspection

- 1. At least once every three years after a management plan is in effect, each local education agency shall conduct a reinspection of all friable and nonfriable known or assumed ACBM in each school building that they lease, own, or use for head start, pre-K programs, elementary, or secondary education.
- a. Review previous inspection data in the management plan and compare to existing school conditions and correct for any changes.
- b. Review the management plan and ensure it meets the requirements of LAC 33:III.2723 and reflects current conditions.
- 2. Each inspection shall be made by an accredited inspector.

- 3. For each area of a school, each person performing a reinspection shall:
- a. visually reinspect, and reassess, under LAC 33:III.2713, the condition of all friable known or assumed ACBM;
- b. visually inspect material that was previously considered nonfriable ACBM and touch the material to determine whether it has become friable since the last inspection or reinspection;
- c. identify any homogeneous areas with material that has become friable since the last inspection or reinspection;
- d. for each homogeneous area of newly friable material that is already assumed to be ACBM, bulk samples may be collected and submitted for analysis in accordance with LAC 33:III.2709 and 2711;
- e. visually inspect, sample, analyze, and assess the conditions of building materials that have been added to the school since the last inspection or reinspection;
- f. assess, under LAC 33:III.2713, the condition of the newly friable material in areas where samples are collected and of newly friable material in areas assumed to be ACBM;
- g. reassess, under LAC 33:III.2713, the condition of friable known or assumed ACBM previously identified;
- h. record the following and submit to the person designated under LAC 33:III.2705 a copy of such record for inclusion in the management plan within 30 days of the reinspection:
- i. the date of the reinspection, the name and signature of the person making the reinspection, a copy of his or her accreditation certificate current at the time of the reinspection, and any changes in the condition of known or assumed ACBM;
- ii. the exact locations where samples are collected during the reinspection, a description of the manner used to choose sampling locations, the name and signature of each accredited inspector who collected the samples, a copy of the accreditation certificate current at the time of the reinspection; and
- iii. any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, and a copy of accreditation certificate current at the time of assessment or reassessment.
- C. General. Thermal system insulation that has retained its structural integrity and that has an undamaged protective jacket or wrap that prevents fiber release shall be treated as nonfriable and therefore is subject only to periodic surveillance and preventive measures as necessary.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:699 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1222 (August 2001), amended by the Office of the Secretary, Legal Division, LR 40:503 (March 2014).

§2709. Sampling

- A. Surfacing Material. An accredited inspector shall collect, in a statistically random manner that will ensure that the samples are representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM. The inspector shall collect the samples as follows.
- 1. At least three bulk samples shall be collected from each homogeneous area that is 1,000 ft² or less, except as provided in LAC 33:III.2711.C.2.
- 2. At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 ft² but less than or equal to 5,000 ft², except as provided in LAC 33:III.2711.C.2.
- 3. At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 ft², except as provided in LAC 33:III.2711.C.2.

B. Thermal System Insulation

- 1. Except as provided in Paragraphs B.2-4 of this Section and LAC 33:III.2711.C, an accredited inspector shall collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM.
- 2. An accredited inspector shall collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet.
- 3. In a manner sufficient to determine whether the material is ACM or not ACM, the accredited inspector shall collect bulk samples from each insulated mechanical system that is not assumed to be ACM where cement or plaster is used on fittings such as tees, elbows, or valves, except as provided under LAC 33:III.2711.C.2.
- 4. Bulk samples are not required to be collected from any homogeneous area where the accredited inspector has determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-ACBM.
- C. Miscellaneous Material. In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.
- D. Nonfriable Suspected ACBM. If any homogeneous area of nonfriable suspected ACBM is not assumed to be ACM, then an accredited inspector shall collect, in a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from the homogeneous area of nonfriable suspected ACBM that is not assumed to be ACM.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), repromulgated by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994).

§2711. Analysis

- A. Local education agencies and the state government shall have bulk samples, collected under LAC 33:III.2709, and air samples collected under LAC 33:III.2717, and submitted for analysis, analyzed for asbestos using laboratories accredited under the provisions of LAC 33:I, Subpart 3, Chapters 45-59.
- B. Bulk samples shall not be composited for analysis and shall be analyzed for asbestos content by polarized light microscopy (PLM), using the "interim method for the determination of asbestos in bulk insulation samples," found at 40 CFR part 763 subpart E, appendix E.
 - C. The following applies to homogeneous areas.
- 1. A homogeneous area is considered not to contain ACM only if the results of all samples required to be collected from the area show asbestos in amounts of 1 percent or less.
- 2. A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent.
- D. The name and address of each laboratory performing an analysis, the date of analysis, and the name and signature of the person performing the analysis shall be submitted to the person designated under LAC 33:III.2705 for inclusion into the management plan within 30 days of the analysis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), repromulgated by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), amended LR 22:699 (August 1996), amended by the Office of the Secretary, Legal Division, LR 40:504 (March 2014).

§2713. Assessment

- A. The local education agency or state government shall have an accredited inspector provide the following.
- 1. For each inspection and reinspection conducted under LAC 33:III.2707.A and B and previous inspections specified under LAC 33:III.2735, the local education agency or the state government shall have an accredited inspector provide a written assessment of all friable known or assumed ACBM in the school or state building.
- 2. Each accredited inspector providing a written assessment shall sign and date the assessment, include a copy of his or her accreditation certificate current at the time of assessment and submit a copy of the assessment to the person designated under LAC 33:III.2705 for inclusion in the management plan within 30 days of the assessment.

- B. The inspector shall classify and give reasons in the written assessment for classifying the ACBM and suspected ACBM assumed to be ACM in the school or state building into one of the following categories:
- 1. damaged or significantly damaged thermal system insulation ACM;
 - 2. damaged friable surfacing ACM;
 - 3. significantly damaged friable surfacing ACM;
- damaged or significantly damaged friable miscellaneous ACM;
 - 5. ACBM with potential for damage;
 - 6. ACBM with potential for significant damage; or
- 7. any remaining friable ACBM or friable suspected ACBM.
 - C. Assessment may include the following considerations.
- 1. Location and the amount of the material, both in total quantity and as a percentage of the functional space, may be considered.
- 2. Condition of the material, may be included, specifying:
- a. type of damage or significant damage (e.g., flaking, blistering, water damage, or other signs of physical damage);
- b. severity of damage (e.g., major flaking, severely torn jackets, as opposed to occasional flaking and minor tears to jackets); and
- c. extent or spread of damage over large areas or large percentages of the homogeneous area.
 - 3. Whether the material is accessible may be included.
- 4. The material's potential for disturbance may be considered.
- 5. Known or suspected causes of damage or significant damage may be included (e.g., air erosion, vandalism, vibration, water).
- 6. Preventative measures which might eliminate the reasonable likelihood of undamaged ACM from becoming significantly damaged may be considerations.
- D. The local education agency or the state government shall select a person accredited to develop management plans to review the results of each inspection, reinspection, and assessment for the school or state building and to conduct any other necessary activities in order to recommend in writing to the local education agency or the state government appropriate response actions. The accredited person shall sign and date the recommendation, provide a copy of his or her accreditation certificate current at the time of management plan development or other action, and submit a copy of the recommendation to the person designated under LAC 33:III.2705.A.7.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), amended by the Office of the Secretary, Legal Division, LR 40:504 (March 2014).

§2717. Response Actions

- A. The local education agency or the state government shall select and implement in a timely manner the appropriate response actions in this Section consistent with the assessment conducted in LAC 33:III.2713. The response actions selected shall be sufficient to protect human health and the environment. The local education agency or the state government may then select, from the response actions which protect human health and the environment, that action which is the least burdensome method. Nothing in this Section shall be construed to prohibit removal of ACBM from a school or state building at any time, should removal be the preferred response action of the local education agency or the state government. If any damaged or significantly damaged thermal system insulation, friable surfacing ACM or miscellaneous ACM is present, the local education agency or the state government shall:
- 1. immediately isolate the area with the damaged or significantly damaged thermal system insulation, and restrict access to protect human health and the environment until the response action is completed; and
- 2. perform any response actions in accordance with appropriate requirements as provided in LAC 33:III.5151.
- B. If damaged or significantly damaged thermal system insulation ACM is present in a building, the local education agency or the state government shall:
 - 1. repair the damaged area;
- 2. remove the damaged material if it is not feasible, due to technological factors, to repair the damage; and
- 3. maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition.
 - C. Selection of Response Action for Damaged ACM
- 1. If damaged friable surfacing ACM or damaged friable miscellaneous ACM or damaged floor covering that contains ACM is present in a school or state building, the local education agency, or the state government shall select from among the following response actions: encapsulation, enclosure, removal, or repair of the damaged material.
- 2. In selecting the response action from among those that meet the definition in LAC 33:III.2703 and, the local education agency or the state government shall determine which of these response actions protects human health and the environment. For purposes of determining which of these response actions are the least burdensome, the local education agency or the state government may then consider local circumstances, including occupancy and use patterns

within the school or state building, and its economic concerns, including short- and long-term costs.

- D. Selection of Response Action for Significantly Damaged ACM
- 1. If significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM or significantly damaged floor coverings as defined in LAC 33:III.2703.A that contain ACM is present in a school or state building, the local education agency or the state government shall remove the material in the functional space, or depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.
- E. If any friable surfacing ACM, thermal system insulation ACM friable miscellaneous ACM, or floor coverings that contain ACM that has potential for damage is present in a building, the local education agency or the state government shall at least implement an operations and maintenance (O and M) program, as described under LAC 33:III.2719.
- F. If any friable surfacing ACM, thermal system insulation ACM, friable miscellaneous ACM, or any floor covering that contains ACM that has potential for significant damage is present in a building, the local education agency or the state government shall:
- 1. implement an O and M program, as described under LAC 33:III.2719;
- 2. institute preventive measures appropriate to eliminate the reasonable likelihood that the ACM or its covering will become significantly damaged, deteriorated, or delaminated; and
- 3. remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented, unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary to avoid an imminent and substantial endangerment to human health or the environment.
- G. A response action related to removal of floor coverings that contain ACM in a school or state building shall follow the requirements of this Section and those requirements related to renovations in LAC 33:III.5151.F and J.
- H. Response actions including removal, encapsulation, enclosure, or repair, other than SSSD repairs, shall be designed, supervised and conducted by persons accredited to design, supervise and conduct response actions.
- I. Local education agencies and the state government shall comply with either the OSHA asbestos worker protection for general industry at 29 CFR 1910.1001 or the asbestos construction standard at 29 CFR 1926.1101, whichever is applicable.
 - J. Completion of Response Actions

- 1. At the conclusion of any action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, a person designated by the local education agency or the state government, shall visually inspect each functional space where such action was conducted to determine whether the action has been properly completed.
- 2. The following requirements apply to collection and analysis of air samples.
- a. A person designated by the local education agency or the state government shall collect air samples using aggressive sampling as described in EPA regulations contained in 40 CFR part 763, subpart E, appendix A to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for SSSD projects.
- b. Local education agencies and the state government shall have air samples collected under this Section analyzed for asbestos using laboratories accredited by the Department of Environmental Quality according to LAC 33:I, Subpart 3, Chapters 45-59, to conduct such analysis using phase contrast microscopy (PCM) and transmission electron microscopy (TEM) equipped with an energy dispersive x-ray analysis system or, under circumstances permitted in this Section.
- 3. Except as provided in Paragraph J.4, 5, or 7 of this Section, an action to remove, encapsulate, or enclose ACBM shall be considered complete when the average concentration of asbestos of five air samples collected within the affected functional space and analyzed by the TEM method contained in EPA regulations 40 CFR part 763, subpart E, appendix A is not statistically significantly different, as determined by the Z-test calculation found in EPA regulations 40 CFR part 763, subpart E, appendix A from the average asbestos concentration of five air samples collected at the same time outside the affected functional space and analyzed in the same manner, and the average asbestos concentration of the three field blanks described in EPA regulations, 40 CFR part 763, subpart E, appendix A is below the filter background level of 70 structures per square millimeter (70 s/mm²).
- 4. An action may also be considered complete if the volume of air drawn for each of the five samples collected within the affected functional space is equal to or greater than 1,199 L of air for a 25-mm filter or equal to or greater than 2,799 L of air for a 37-mm filter, and the average concentration of asbestos as analyzed by the TEM method in EPA regulations, 40 CFR part 763, subpart E, appendix A for the five air samples does not exceed the filter background level of 70 structures per square millimeter (70 s/mm²). If the average concentration of asbestos of the five air samples within the affected functional space exceeds 70 s/mm², or if the volume of air in each of the samples is less than 1,199 L of air for a 25-mm filter or less than 2,799 L of air for a 37mm filter, the action shall be considered complete only when the requirements of Paragraph J.3 or 5 of this Section are met.

- 5. At any time, a local education agency or the state government may analyze air monitoring samples collected for clearance purposes by phase contrast microscopy (PCM) to confirm completion of removal, encapsulation, or enclosure of ACBM that is greater than SSSD and less than or equal to 64 square feet or 60 linear feet. The action shall be considered complete when the results of samples collected in the affected functional space and analyzed by PCM using the National Institute for Occupational Safety and Health (NIOSH) Method 7400 entitled "Fibers" published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987, show that the concentration of fibers for each of the five samples is less than or equal to a limit of quantitation for PCM (0.01 fibers per cubic centimeter [0.01 f/cm³] of air). A description of the method is available at the Office of the Federal Register information center. The method is incorporated as it exists on the effective date of this Rule, and a notice of any change to the method will be published in the *Louisiana Register*.
- 6. To determine the amount of ACM affected under Paragraph J.5 of this Section, the local education agency or the state government shall add the total square or linear footage of ACM within the containment barriers used to isolate the functional space for the action to remove, encapsulate, or enclose the ACM. Contiguous portions of material subject to such action conducted concurrently or at approximately the same time within the same school or state building shall not be separated to qualify under Paragraph J.5 of this Section.
- 7. In the case of a demolition of a school or state building where occupants will not reenter the building, clearance sampling is not required.
- K. Response actions in a school building, state building, or public and commercial building including removal, encapsulation, enclosure, or repair, other than SSSD shall be designed, supervised, and conducted by persons accredited to perform such activities.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:699 (August 1996), amended by the Office of the Secretary, Legal Division, LR 40:504 (March 2014).

§2719. Operations and Maintenance

A. Applicability. The local education agency or the state government shall implement and maintain an operations, maintenance, and repair (O and M) program under this Section whenever any friable ACM is present or assumed to be present in a building that it leases, owns, or otherwise uses as a school or state building. Any material identified as nonfriable ACM or nonfriable assumed ACM shall be treated as friable ACM for the purposes of this Section when the material is about to become friable as a result of activities performed in the school or state building.

B. Worker Protection. Local education agencies and the state government shall comply with either the OSHA asbestos worker protection for general industry at 29 CFR 1910.1001 or the asbestos construction standard at 29 CFR 1926.1101, whichever is applicable. Local education agencies and the state government may consult EPA regulations contained in 40 CFR 763, subpart E if their employees are performing small-scale operations, maintenance, and repair activities of short-duration.

C. Cleaning

- 1. Initial Cleaning. Unless the building has been cleaned using equivalent methods within the previous six months, all areas of a school or state building where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM is present shall be cleaned at least once after the completion of the inspection required by LAC 33:III.2707.A and before the initiation of any response action, other than O and M activities or repair, according to the following procedures.
 - a. HEPA-vacuum or steam-clean all carpets.
- b. HEPA-vacuum or wet-clean all other floors and all other horizontal surfaces.
- c. Dispose of all debris, filters, mopheads, and cloths in sealed, leak-tight containers.
- 2. Additional Cleaning. The accredited management planner shall make a written recommendation to the local education agency or the state government on whether additional cleaning is needed, and if so, the methods and frequency of such cleaning.
- D. Operations and Maintenance Activities. The local education agency or the state government shall ensure that the procedures described below to protect building occupants shall be followed for any operations and maintenance activities disturbing friable ACBM.
- 1. Restrict entry into the area by persons other than those necessary for the maintenance project, either by physically isolating the area or by scheduling.
- 2. Post signs to prevent entry by unauthorized persons.
- 3. Shut off or temporarily modify the air-handling system and restrict other sources of air movement.
- 4. Use work practices or other controls, such as wet methods, protective clothing, HEPA-vacuums, minienclosures, and glove bags, as necessary to inhibit the spread of any released fibers.
- 5. Clean all fixtures or other components in the immediate work area.
- 6. Place the asbestos debris and other cleaning materials in sealed, clear, leak-tight containers properly labeled as may be required by LAC 33:III.5151.F.
- E. Maintenance Activities other than Small-Scale, Short-Duration. Maintenance activity that disturbs friable ACM in

a school building, state building, or public and commercial building including removal, encapsulation, enclosure, or repair, other than SSSD shall be designed, supervised, and conducted by persons accredited to perform such activities.

F. Fiber Release Episodes

- 1. Minor Fiber Release Episode. The local education agency or the state government shall ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., the falling or dislodging of 3 square or linear feet or less of friable ACBM).
- a. Thoroughly saturate the debris using wet methods.
- b. Clean the area, as described in Subsection C of this Section.
- c. Place the asbestos debris in a sealed, leak-tight container properly labeled as may be required by LAC 33:III.5151.F.
- d. Repair the area of damaged ACM with materials such as asbestos-free spackling, plaster, cement, or insulation, or seal with latex paint or an encapsulant, or immediately have the appropriate response action implemented as required by LAC 33:III.2717.
- 2. Major Fiber Release Episode. The local education agency or the state government shall ensure that the procedures described below are followed in the event of a major fiber release episode (i.e., the falling or dislodging of more than 3 square or linear feet of friable ACBM).
- a. Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.
- b. Shut off or temporarily modify the air-handling system to prevent the distribution of fibers to other areas in the building.
- c. Provide a prompt notification to SPOC of the major fiber release episode in accordance with LAC 33:I.3923 within 24 hours of the discovery of such an episode, and in writing as specified in LAC 33:I.3925 within seven calendar days after the initial notification.
- 3. A response action to a major fiber release in a school building, state building, including removal, encapsulation, enclosure, or repair, other than SSSD shall be designed, supervised, and conducted by persons accredited to perform such activities.

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33:2090 (October 2007), amended by the Office of the Secretary, Legal Division, LR 40:506 (March 2014).

§2721. Training and Periodic Surveillance

A. Training

- 1. The local education agency or the state government shall ensure, prior to the implementation of the O and M provisions of the management plan, that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in a building that contains ACBM receive at least two hours of awareness training whether or not they are required to work with ACBM. New custodial and maintenance employees shall be trained within 60 days after commencement of employment. Training shall include, but not be limited to:
- a. information regarding asbestos and its various uses and forms;
- b. information on the health effects associated with asbestos exposure;
- c. locations of ACBM identified throughout each school or state building in which they work;
- d. recognition of damage, deterioration, and delamination of ACBM; and
- e. name and telephone number of the person designated to carry out general local education agency or the state government responsibilities under LAC 33:III.2705 and the availability and location of the management plan.
- 2. The local education agency or the state government shall ensure that all members of its maintenance and custodial staff who conduct any activities that will result in the disturbance of 3 square or linear feet of ACBM or less shall receive the training described in Paragraph A.1 of this Section and 14 hours of additional training. Additional training shall include, but not be limited to:
- a. descriptions of the proper methods of handling ACBM;
- b. information on the use of respiratory protection as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry, September 1986 (EPA 560/OPTS-86-001), available from TSCA Assistance Office (TS-799), Office of Toxic Substances, Environmental Protection Agency, RM. E-543, 401 M St., S.W., Washington, D.C. 20460, and other personal protection measures;
- c. the provisions of this Section and LAC 33:III.2717, LAC 33:III.2799, Appendix A, regulations contained in LAC 33:III.Chapter 51, Subchapter M, EPA regulations contained in 40 CFR 763, subpart G, and OSHA regulations contained in 29 CFR 1926.1101; and
- d. hands-on training in the use of respiratory protection, other personal protection measures, and good work practices.

- 3. The local education agency or the state government shall ensure that all members of its maintenance and custodial staff who conduct any activities that will result in the disturbance of more than 3 square or linear feet of ACBM shall receive the training described in LAC 33:III.2739.B.3.
- 4. Local education agency or the state government maintenance and custodial staff who have attended accredited asbestos training or received equivalent training for O and M and periodic surveillance activities involving asbestos shall be considered trained for the purposes of this Section.

B. Periodic Surveillance

- 1. At least once every six months after a management plan is in effect, each local education agency or the state government shall conduct periodic surveillance in each building that it leases, owns, or uses as a school or state building that contains ACBM or is assumed to contain ACBM.
 - 2. Each person performing periodic surveillance shall:
- a. visually inspect all areas that are identified in the management plan as ACBM or assumed ACBM;
- b. record the date of the surveillance, his or her name, and any changes in the condition of the materials; and
- c. submit to the person designated to carry out general local education agency or state government responsibilities under LAC 33:III.2705 a copy of such record for inclusion in the management plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

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§2723. Management Plans

- A. Local education agencies or the state government shall submit Form AAC-8 concerning management plans for the following buildings. Local education agencies and the state government are exempt from the requirement to develop and submit a management plan in connection with Form AAC-8 if there has been a determination that there is no asbestos present in the building in accordance with LAC 33:III.2735.A.3, 4, 6, and 7.
- 1. Each local education agency or the state government shall develop an asbestos management plan for each school, including all buildings that are leased, owned, or used as school or state buildings, and submit the plan to the Office of Environmental Services. After June 20, 1994, the original submittal of each plan shall be submitted at least 30 days prior to its use as a school or state building using the Form AAC-8, required elements for asbestos management

- plans (latest revised form can be obtained from the Office of Environmental Services or through the department's website. The plan may be submitted in stages, if applicable that cover portions of the school or state building under the authority of the local education agency or the state government as specified in LAC 33:III.2701.C.1.
- 2. If a building to be used as part of a school or is leased or acquired, the local education agency shall include the additional building in the management plan for the school prior to its use as a school. The revised portions of the management plan shall be submitted to the Office of Environmental Services.
- 3. If a local education agency or the state government begins to use a building as a school or state building more than 90 days after promulgation of this regulation, the local education agency or the state government shall submit a management plan for the school or state building to the Office of Environmental Services prior to its use as a school or state building. Each plan developed or modified after June 20, 1994, shall include Form AAC-8, required elements for management plans.
- B. Each local education agency or the state government shall implement its management plan within 180 days after occupancy.
- C. Each local education agency or the state government shall maintain and update its management plan to keep it current with ongoing operations and maintenance, periodic surveillance, inspection, reinspection, and response action activities. All provisions required to be included in the management plan under this Section shall be retained as part of the management plan (by either hard copy, or as an electronic file), as well as any information that has been revised to bring the plan up-to-date.
- D. The management plan shall be developed by a management planner accredited by the department at the time the work was performed, and shall include the following.
- 1. The name and address of each school and state building shall be listed and whether the school and state building contains friable ACBM, nonfriable ACBM, and friable and nonfriable suspected ACBM assumed to be ACM shall be specified.
- 2. The following shall be included for each inspection conducted before December 14, 1987:
 - a. the date of the inspection;
- b. a blueprint, diagram, or written description of each school or state building that identifies clearly each location and approximate square or linear footage of any homogeneous or sampling area where material was sampled for ACM, and, if possible, the exact locations where bulk samples were collected and the dates of collection;
- c. a copy of the analyses of any bulk samples, dates of analyses, and a copy of any other laboratory reports pertaining to the analyses;

- d. a description of any response actions or preventive measures taken to reduce asbestos exposure, including if possible, the names and addresses of all contractors involved, start and completion dates of the work, and results of any air samples analyzed during and upon completion of the work; and
- e. a description of assessments, required under LAC 33:III.2713, of material that was identified before December 14, 1987, as friable ACBM or friable suspected ACBM assumed to be ACM, and the name and signature, state of accreditation, and accreditation number of each accredited person making the assessments.
- 3. The following shall be included for each inspection and reinspection conducted under LAC 33:III.2707:
- a. the date of the inspection or reinspection, the name and signature, and a copy of the accreditation certificate current at the time of inspection of each accredited inspector performing the inspection or reinspection;
- b. a blueprint, diagram, or written description of each school or state building that clearly identifies each location and approximate square or linear footage of homogeneous areas where material was sampled for ACM, the exact location where each bulk sample was collected, date of collection, homogeneous areas where friable suspected ACBM is assumed to be ACM, and areas where nonfriable suspected ACBM is assumed to be ACM;
- c. a description of the manner used to determine sampling locations, and the name and signature of each accredited inspector collecting samples, and a copy of the accreditation certificate current at the time of inspection;
- d. a copy of the analyses of any bulk samples collected and analyzed, the name and address of any laboratory that analyzed bulk samples, a statement that the laboratory meets the applicable requirements of LAC 33:III.2711.A, the date of analysis, the name and signature of the person performing the analysis, and a copy of the laboratory accreditation certificate; and
- e. a description of assessments, required under LAC 33:III.2713, of all ACBM and suspected ACBM assumed to be ACM, and the name, signature, and a copy of the accreditation certificate current at the time of inspection of each accredited person making the assessments.
- 4. The name, address, and telephone number of the person designated under LAC 33:III.2705 to ensure that the duties of the local education agency are carried out, the identity and qualifications of the person providing the training to the person designated, a description of and documentation of the training provided, and dates and training hours taken by that person to carry out the duties shall be included.
- 5. The recommendations made to the local education agency regarding response actions under LAC 33:III.2713.D, and the name, and signature of each person making the recommendations, and a copy of the accreditation certificate current at the time shall be included.

- 6. A detailed description of preventive measures and response actions to be taken for any friable ACBM, including methods to be used, the locations where such measures and action will be taken, reasons for selecting the response action or preventive measure, and a schedule for beginning and completing each preventive measure and response action shall be included.
- 7. With respect to the person or persons who inspected for ACBM and who will design or carry out response actions, except for operations and maintenance, with respect to the ACBM, a statement that the person(s) is accredited under the provisions in LAC 33:III.2799, Appendix A and a copy of the accreditation certificate current at the time shall be included.
- 8. A detailed description in the form of a blueprint, diagram, or in writing of any ACBM or suspected ACBM assumed to be ACM that remains in the school or state building once response actions are undertaken pursuant to LAC 33:III.2717 shall be included. This description shall be updated as response actions are completed.
- 9. A plan for reinspection under LAC 33:III.2707, a plan for operations and maintenance activities under LAC 33:III.2719, and a plan for periodic surveillance under LAC 33:III.2721; a description of the recommendation made by the management planner regarding additional cleaning under LAC 33:III.2719.C.2 as part of an operations and maintenance program; and the response of the local education agency or the state government to that recommendation shall be included.
- 10. A description of steps taken to inform workers and building occupants, or their legal guardians, about inspections, reinspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress shall be included.
- 11. An evaluation of the resources needed to complete response actions successfully and carry out reinspection, operations and maintenance activities, periodic surveillance, and training shall be included.
- 12. With respect to each consultant who contributed to the management plan, the name of the consultant and a statement that the consultant is accredited according to the provisions in LAC 33:III.2799.Appendix A shall be included.
- E. A local education agency or the state government may require each management plan to contain a statement signed by an accredited management plan developer that such person has prepared or assisted in the preparation of such plan or has reviewed such plan, and that such plan is in compliance with this Chapter. Such statement may not be signed by a person who, in addition to preparing or assisting in preparing the management plan, also implements (or will implement) the management plan.
- F. Copies of the management plan shall be made available, and notification of their availability shall be given as follows.

- 1. Upon submission of a management plan for review, a local education agency or state government shall keep a copy of the plan in its administrative office. The management plans shall be available, without cost or restriction, for inspection by representatives of EPA and the state, and the public, including parents, teachers, other school or public personnel, and their representatives. The local education agency or the state government may charge a reasonable cost to make copies of management plans.
- 2. Each local education agency or the state government shall maintain in its administrative office a complete, updated copy of a management plan for each school or state building under its administrative control or direction. The management plans shall be available, during normal business hours, without cost or restriction, for inspection by representatives of EPA and the state and the public, including teachers, other school personnel and their representatives, and parents. The local education agency or the state government may charge a reasonable cost to make copies of management plans.
- 3. Each school or state building shall maintain in its administrative office, or in a central location approved by the administrative authority, a complete, updated copy of the management plan for that school or state building. Management plans shall be available for inspection, without cost or restriction, to workers before work begins in any area of a school or state building. The school or state building shall make management plans available for inspection to representatives of EPA and the state and to the public, including parents, teachers, and other school or public personnel and their representatives within five working days after receiving a request for inspection. The school or state building may charge a reasonable cost to make copies of the management plan.
- 4. Upon submission of its management plan and at least once each year, the local education agency or the state government shall provide notice to parents, teachers, and employees of the availability of management plans by one or more of the following: letter, e-mail, text message, or website post. The management plan shall include a description of the steps taken to provide notice and a dated copy of the notification.
- G. Records required under LAC 33:III.2725 shall be made by local education agencies and the state government and maintained as part of the management plan.
- H. Each management plan must contain a true and correct statement, signed by the individual designated by the local education agency or the state government under LAC 33:III.2705, which certifies that the general, local education agency or the state government responsibilities, as stipulated by LAC 33:III.2705, have been met or will be met.

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the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:700 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2457 (November 2000), amended by the Office of Environmental Assessment, LR 30:2021 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2444 (October 2005), LR 33:2090 (October 2007), amended by the Office of the Secretary, Legal Division, LR 40:507 (March 2014).

§2725. Recordkeeping

- A. Records required under this Section shall be maintained in a centralized location in the administrative office of the school, state building, local education agency, or state government as part of the management plan. The records may be kept in hard copy or electronic format providing all necessary information and documentation (e.g., signature) is included. For each homogeneous area where all ACBM has been removed, the local education agency or the state government shall ensure that such records are retained for three years after the next reinspection required under LAC 33:III.2707.B.1, or for an equivalent period.
- B. For each preventive measure and response action taken for friable and nonfriable ACBM and friable and nonfriable suspected ACBM assumed to be ACM, the local education agency or the state government shall provide:
- 1. a detailed written description of the measure or action, including methods used, the location where the measure or action was taken, reasons for selecting the measure or action, start and completion dates of the work, names and addresses of all contractors involved, accreditation numbers of contractors at the time of the action, and if ACBM is removed, the name and location of the storage or disposal site of the ACM; and
- 2. the name and signature of any person collecting any air sample required to be collected at the completion of certain response actions specified by LAC 33:III.2717.J, the locations where samples were collected, date of collection, the name and address of the laboratory analyzing the samples, the date of analysis, the results of the analysis, the method of analysis, the name and signature of the person performing the analysis, and a statement that the laboratory meets the applicable requirements of LAC 33:III.2717.J.2.b, and a copy of the laboratory accreditation certificate.
- C. For each person required to be trained under LAC 33:III.2721.A.1, 2 and 3, and for supervisors who direct workers who may disturb ACM, the local education agency or the state government shall provide the person's name and job title, the date that training was completed by that person, the location of the training, the name of the person who conducted the training, and the number of hours completed in such training.
- D. For each time that periodic surveillance under LAC 33:III.2721.B is performed, the local education agency or the state government shall record the name of each person performing the surveillance, the date of the surveillance, and any changes in the conditions of the materials.

- E. For each time that cleaning under LAC 33:III.2719.C is performed, the local education agency or the state government shall record the name of each person performing the cleaning, the date of such cleaning, the locations cleaned, and the methods used to perform such cleaning.
- F. For each time that operations and maintenance activities under LAC 33:III.2719.D are performed, the local education agency or the state government shall record the name of each person performing the activity, the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of the storage or disposal site of the ACM.
- G. For each time that major asbestos activity under LAC 33:III.2719.E is performed, the local education agency or the state government shall provide the name, signature, and accreditation number of each person performing the activity, and the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of the storage or disposal site of the ACM.
- H. For each fiber release episode under LAC 33:III.2719.F, the local education agency or the state government shall provide the date and location of the episode, the method of repair, preventive measures or response action taken, the name of each person performing the work, and if ACBM is removed, the name and location of the storage and disposal site of the ACM.
- I. For the person designated under LAC 33:III.2705.A.7, the local education agency or state government shall provide the person's name, job title, the date training was received, the name and qualifications of the person providing the training to the designated person, a description and documentation of the training provided.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

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§2727. Warning Labels

- A. The local education agency or the state government shall attach a warning label immediately adjacent to any friable and nonfriable ACBM and suspected ACBM assumed to be ACM located in routine maintenance areas (such as boiler rooms) at each school or state building. This shall include:
- 1. friable ACBM that was responded to by a means other than removal; and
- 2. ACBM for which no response action was carried out.

- B. All labels shall be prominently displayed in readily visible locations and shall remain posted until the ACBM that is labeled is removed.
- C. The warning label shall read, in print which is readily visible because of large size or bright color, as follows:

CAUTION: ABSBESTOS. HAZARDOUS.
DO NOT DISTURB WITHOUT PROPER TRAINING
AND EQUIPMENT.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994).

§2731. Compliance and Enforcement

A. For failing to comply with the regulations of this Chapter, knowingly submitting false or inaccurate information, or directing others in such actions, civil and criminal penalties may be assessed under R.S. 30:2025.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended LR 16:397 (May 1990).

§2735. Exclusions

- A. A local education agency or the state government shall not be required to perform an inspection under LAC 33:III.2707.A in any sampling area as defined in LAC 33:III.2703 or homogeneous area of a school or state building where the following conditions exist.
- 1. An accredited inspector has determined that, based on sampling records, friable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under LAC 33:III.2705 for inclusion in the management plan. However, an accredited inspector shall assess the friable ACBM under LAC 33:III.2713.
- 2. An accredited inspector has determined that, based on sampling records, nonfriable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under LAC 33:III.2705 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable has become friable since that previous inspection and shall assess the newly friable ACBM under LAC 33:III.2713.
- 3. Based on sampling records and inspection records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area, and the

records show that the area was sampled before December 14, 1987, in substantial compliance with LAC 33:III.2707.A, which for the purposes of this Section means in a random manner and with a sufficient number of samples to reasonably ensure that the area is not ACBM.

- a. The accredited inspector shall sign and date a statement, with his or her accreditation number, that the homogeneous or sampling area determined not be ACBM was sampled in substantial compliance with LAC 33:III.2707.A.
- b. Within 30 days after the inspector's determination, the local education agency or the state government shall submit a copy of the inspector's statement to the Office of Environmental Services and shall include the statement in the management plan for that school or state building.
- 4. The Department of Environmental Quality has determined that, based on sampling records and inspection records, no ACBM is present in the homogeneous or sampling area, and the records show that the area was sampled before December 14, 1987, in substantial compliance with LAC 33:III.2707.A. Such determination shall be included in the management plan for that school or state building.
- 5. An accredited inspector has determined that, based on records of an inspection conducted before December 14, 1987, suspected ACBM identified in that homogeneous or sampling area is assumed to be ACM. The inspector shall sign and date a statement to that effect, with his or her accreditation number, and, within 30 days of such determination, submit a copy of the statement to the person designated under LAC 33:III.2705 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable suspected ACBM assumed to be ACM has become friable since the previous inspection and shall assess the newly friable material and previously identified friable suspected ACBM assumed to be ACM under LAC 33:III.2713.
- 6. Based on inspection records and contractor and clearance records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area where asbestos removal operations have been conducted before December 14, 1987, and shall sign and date a statement to that effect and include his or her accreditation number. The local education agency or the state government shall submit a copy of the statement to the Office of Environmental Services and shall include the statement in the management plan for that school or state building.
- 7. An architect or project engineer responsible for the construction of a new school building built after October 12, 1988, or an accredited inspector signs a statement that no ACBM was specified as a building material in any construction document for the building or, to the best of his or her knowledge, no ACBM was used as a building material in the building. The local education agency shall submit a copy of the signed statement of the architect, project

engineer, or accredited inspector to the Office of Environmental Services and shall complete applicable portions of Form AAC-8 (pages 1, 4, and 5) to serve as that portion of the management plan for that school.

- B. The exclusion, under Paragraphs A.1-4 of this Section, from conducting the inspection under LAC 33:III.2707.A shall apply only to homogeneous or sampling areas of a school building that were inspected and sampled before October 17, 1987. The local education agency or the state government shall conduct an inspection under LAC 33:III.2707.A of all areas inspected before October 17, 1987, that were not sampled or were not assumed to be ACM.
- C. If ACBM is subsequently found in a homogeneous or sampling area of a local education agency or the state government that had been identified as receiving an exclusion by an accredited inspector under Paragraph A.3, 4, or 5 of this Section, or an architect, project engineer, or accredited inspector under Paragraph A.7 of this Section, the local education agency or the state government shall have 180 days following the date of identification of ACBM to comply with this Chapter.

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§2739. Agent Accreditation

A. Applicability. The provisions of this Section are applicable to all persons who are involved in abatement, disposal, and/or maintenance involving friable ACM in schools, and state buildings.

B. Requirements

- 1. Except as provided in Paragraph B.2 of this Section, all personnel who design, supervise, or perform response actions; work as management planners; inspect sites; or maintain materials involving friable ACM shall be accredited in accordance with LAC 33:III.2799.Appendix A.
- 2. Except for contracted abatement workers, workers who are engaged in maintenance that may disturb 3 square or linear feet of ACBM or less shall receive the training described in LAC 33:III.2721.A.2 of this Chapter and must work under the close direction of an accredited supervisor during any work they perform which may disturb asbestos.
- 3. Workers who are engaged in maintenance that disturbs more than 3 square or linear feet of ACBM which does involve its actual removal, enclosure, repair, or encapsulation shall receive their initial and refresher training from a recognized training provider in accordance with these regulations. This training shall be in accordance with the

asbestos abatement worker course as described in LAC 33:III.2799, Appendix A, Paragraph B.5, Initial Training and Subsection D, Refresher Training Courses. Workers who participate in the type of project described in this Paragraph shall be accredited in accordance with LAC 33:III.2799, Appendix A and shall work under the close direction of an accredited supervisor during any work they perform.

- 4. Supervisors who are directing workers who may disturb ACM shall receive their initial and refresher training in accordance with LAC 33:III.2799, Appendix A, Paragraph B.4, and Subsection D, Refresher Training Courses from a recognized training provider in accordance with these regulations. Supervisors who participate in the type of project referenced in this Paragraph are responsible for ensuring that:
- a. all personnel are properly trained as specified in LAC 33:III.2721;
- b. training records are available within the facility where the work is performed; and
- c. all work is performed in accordance with LAC 33:III.Chapter 51.Subchapter M; LAC 33:III.Chapter 27; 40 CFR 763, Subpart G, and other applicable state and federal regulations.
- 5. Readily available proof of accreditation for workers and supervisors shall be at the job site or within the facility's confines.

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§2741. Recognized Asbestos Training Providers (RATP) and Principal Trainers

- A. The *recognized asbestos training providers (RATP)* as defined in LAC 33:III.2703.A and its principal trainers shall comply with and direct others to comply with LAC 33:III.Chapters 27 and 51, and other applicable federal, state, and local regulations.
- B. Asbestos Training Course Requirements. The courses conducted by the RATP and its principal trainers shall meet the following requirements.
 - 1. Training courses shall:
- a. meet the requirements of LAC 33:III.2799, Appendix A and TSCA title II; and
- b. be directed to the training materials and be conducted in a professional manner.
 - 2. Initial training courses shall:

- a. include a minimum of two training hours of instruction as provided in LAC 33:III.Chapters 27 and 51; and
- b. be taught according to the criteria and length of time as specified in LAC 33:III.2799, Appendix A, Subsection A.
- 3. Refresher training courses shall be taught according to the criteria and length of time as specified in LAC 33:III.2799, Appendix D.
- 4. Principal Trainers. The principal trainer shall not be a student in the course.
 - 5. Training in a Foreign Language
- a. The training materials used shall be written in the language used for teaching the class.
- b. The principal trainer shall be fluent in the language in which the class is being taught to the students.
- c. Each student taking the class shall be fluent in the language used by the principal trainer.
- 6. Training Facility. The instruction room shall be housed in a commercial or industrial type setting.
- a. The room shall be set up in classroom style setting with an instruction board for the principal trainer to write on, seats, and flat writing surfaces for the students.
- b. The size of the room shall be adequate for instruction, including presentation equipment and hands on training.
 - 7. The principal trainers may utilize guest instructors.
 - 8. Training Materials
- a. Audio-visual methods, such as the use of overheads, slides, and projectors may be used as supplemental training materials.
- b. The training materials shall be applicable to the class being taught and include the latest version of the course materials submitted to the department with the initial or renewal application.
- c. The training materials shall include the most current versions of the DEQ forms posted on the department's website.
- 9. Each student shall be provided with a face photo to attach to his or her application for accreditation.

10. Training Audits

- a. Training course providers and principal trainers shall permit representatives of EPA or the department to attend, evaluate, and monitor any training course without charge.
- b. Unannounced audits may be conducted by the department to ensure compliance with federal and state requirements for specific training courses.

C. Training Completion Certificates

- 1. Unique sequentially-numbered certificates shall be issued to students who successfully pass the training course. The certificate shall include:
 - a. student's name;
- b. form of photo identification and associated number, (e.g., driver's license or state identification card);
- c. the course completed and whether it is initial or refresher training;
 - d. dates of the training course and the examination;
- e. expiration date for training that is one year after the date on which the student completed the course;
 - f. language in which the course was taught;
 - g. original signature of the principal trainer(s);
- h. the name, address, and telephone number of the RATP;
- i. the discipline for which training was received; and
- j. a statement that the person receiving the certificate has completed the requisite training for asbestos accreditation as required under this LAC 33:III.2799, Appendix A and the TSCA title II.
- 2. RATP who provide refresher training shall provide training completion certificates in accordance with Subparagraph C.1.a-j of this Section, except the examination date may be omitted.
- D. Recordkeeping Requirements of RATP. All RATP shall comply with the following minimum recordkeeping requirements.
- 1. Training Course Materials. A RATP shall retain copies of all instructional materials used in the delivery of the classroom training such as student manuals, principal trainer notebooks, and handouts.
- 2. Principal Trainer Qualifications. A RATP shall retain copies of all principal trainers' résumés, and the documents approving each principal trainer issued by the department in advance whenever it changes course principal trainers. Records shall accurately identify the principal trainers who taught each particular training course for each date that a course is offered.
- 3. Examinations. A RATP shall document that each person who receives an accreditation certificate for an initial training course has achieved a passing score on the examination. These records shall clearly indicate the date upon which the exam was administered, the training course and discipline for which the exam was given, the name of the person who proctored the exam, a copy of the exam, and the name and test score of each person taking the exam. The topic and dates of the training course shall correspond to those listed on that person's accreditation certificate.
- 4. Training Certificates. The RATPs shall maintain records that document the names of all persons who have been awarded certificates, their certificate numbers, the

- disciplines for which accreditation was conferred, training and expiration dates, and the training location. The RATP shall maintain the records in a manner that allows verification by telephone of the required information.
- 5. The RATP shall maintain all required records for a minimum of three years. The RATP, however, may retain these records for a longer period of time.
- 6. The RATP shall allow reasonable access to all of the records required by LAC 33:III.2799, Appendix A, and to any other records which may be required for the approval of asbestos RATPs or the accreditation of asbestos training courses to both EPA and to state agencies on request.
- 7. If a RATP ceases to conduct training, the RATP shall notify DEQ and give the department the opportunity to take possession of the provider's asbestos training records.

E. RATP Notifications

- 1. The RATP shall notify the Office of Environmental Services of any change in status of the training organization, (e.g., pending fines, notices of violation, changes in principal trainer status, etc.).
- 2. The RATP shall notify the Office of Environmental Services of the courses that will be taught, including where, when, and who will conduct the class.
- a. The course notification shall include the address of all of the physical locations where the training will be held and the dates for each location.
- b. The course notification form shall include the name of each principal trainer for each training course.
- c. The course notification shall be received in writing, fax, via email, or other methods of submittal approved by the Office of Environmental Services at least five working days prior to class commencement, or one working day prior to class commencement, if only the Louisiana regulations course will be taught.
- 3. Notification of cancellation of classes, rescheduling, or amendment of notification shall:
- a. be received in writing, fax, via email, or other methods of submittal approved by the Office of Environmental Services one day before the class should have commenced; and
- b. indicate the date and time of the course that is being cancelled, rescheduled or amended;
- c. rescheduled classes or amended notifications shall also indicate the changes that are being requested. This includes, but is not limited to day, time, locations, principal trainer, etc.
- 4. Within 10 working days of the completion of a class, the following shall be received by the Office of Environmental Services in a format approved by the department:
- a. a complete roster of trainees and each principal trainer participating in the course;

- b. a class photograph with a legible name on the back or at the bottom identifying each student and principal trainer;
- c. each student's official identification number (e.g., driver's license, state identification card, or passport);
- d. a 1" x 1 1/4" photograph of the face (front view) of each student;
- e. the name of each principal trainer who taught the class; and
 - f. each student's examination grades.
- i. If a student fails an initial exam, the roster shall include the word "failed" adjacent to the name on the roster.
- ii. If a student retakes a previously failed exam, a separate notification shall be received by the Office of Environmental Services within five working days of the exam.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 40:508 (March 2014).

§2799. Appendix A—Agent Accreditation Plan

- A. Purpose. Training requirements for purposes of accreditation are specified in both terms of required subjects of instruction and in terms of length of training. The duration of initial and refresher training courses is specified in numbers of days. A day of training equals eight consecutive training hours, including breaks and lunch. Course instruction shall be provided either by DEQ RATPs or from training providers recognized by EPA or an EPA authorized state. The training requirements that follow are for the training of persons required to have accreditation under the Toxic Substances Control Act (TSCA) title II and LAC 33:III.2739.
- 1. Initial training courses for a specific discipline (e.g., workers, inspectors) require hands-on training. For asbestos abatement supervisors and workers, hands-on training shall include working with asbestos-substitute materials, fitting and using respirators, use of glove-bags, donning protective clothing, constructing a decontamination unit, as well as other abatement work activities. Hands-on training shall permit all supervisors and workers to have actual experience performing tasks associated with asbestos abatement. For inspectors, hands-on training shall include conducting a simulated building walk-through inspection and respirator fit testing.
- 2. Training requirements for each of the five accredited disciplines are outlined below. Persons in each discipline perform a different job function and distinct role. Inspectors identify and assess the condition of ACM, or suspect ACM. Management planners use data gathered by inspectors to assess the degree of hazard posed by ACBM in schools to determine the scope and timing of appropriate response actions needed for schools. Project designers determine how asbestos abatement work should be

- conducted. Lastly, workers and contractor/supervisors carry out and oversee abatement work. Each accredited discipline and training curriculum is separate and distinct from the others. A person seeking accreditation in any of the five accredited MAP disciplines cannot attend two or more courses concurrently, but may attend such courses sequentially. All courses, both initial and refresher, shall be completed within 14 days of the commencement of the course.
- B. Initial Training. The following are the initial training course requirements for persons required to have accreditation under LAC 33:III.2739 and Paragraph F.1 of this Section.
- 1. Inspectors. All persons who inspect for ACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools, and state buildings, shall be trained in accordance with this Section and accredited by the department. All persons seeking accreditation as inspectors shall complete a three-day training course as outlined below. The three-day program shall include lectures, demonstrations, four training hours of hands-on training, individual respirator fit testing, course review, and a written examination. The use of audiovisual materials is recommended to complement lectures, where appropriate. The inspector training course shall adequately address the following topics. Hands-on training shall include conducting a simulated building walk-through inspection and respirator fit testing.
- a. Background Information on Asbestos: identification of asbestos; examples and discussion of the uses and locations of asbestos in buildings; physical appearance of asbestos.
- b. Potential Health Effects Related to Asbestos Exposure: the nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency period for asbestos-related diseases; a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancer of other organs.
- c. Functions/Qualifications and Role of Inspectors: discussions of prior experience and qualifications for inspectors and management planners; discussions of the functions of an accredited inspector as compared to those of an accredited management planner; discussion of the inspection process including inventory of ACM and physical assessment.
- d. Legal Liabilities and Defenses: responsibilities of the inspector and management planner; a discussion comprehensive general liability policies, claims made and occurrence policies, environmental and pollution liability policy clauses; state liability insurance requirements; bonding and the relationship of insurance availability to bond availability.
- e. Understanding Building Systems: the interrelationship between building systems, including an

overview of common building physical plant layouts; heat, ventilation, and air conditioning (HVAC) system types-physical organization and where asbestos is found on HVAC components; building mechanical systems, their types and organization, and where to look for asbestos on such systems; inspecting electrical systems, including appropriate safety precautions; reading blueprints and as-build drawings.

- f. Public/Employee/Building Occupant Relations: notifying employee organizations about the inspection; signs to warn building occupants; tact in dealing with occupants and the press; scheduling of inspections to minimize disruption; and education of building occupants about actions being taken.
- g. Pre-Inspection Planning and Review of Previous Inspection Records: scheduling the inspection and obtaining access; building record review; identification of probable homogeneous areas from blueprints or as-built drawings; consultation with maintenance or building personnel; review of previous inspection, sampling, and abatement records of a building; the role of the inspector in exclusions for previously performed inspections.
- h. Inspecting for Friable and Nonfriable Asbestos-Containing Material (ACM) and Assessing the Condition of Friable ACM: procedures to follow in conducting visual inspections for friable and nonfriable ACM; types of building materials that may contain asbestos; touching materials to determine friability; open return air plenums and their importance in HVAC systems; assessing damage, significant damage, potential damage, and potential significant damage; amount of suspected ACM, both in total quantity and as a percentage of the total area; type of damage; accessibility; material's potential for disturbance; known or suspected causes of damage or significant damage; deterioration algorithm methods as assessment factors.
- Bulk Sampling/Documentation of Asbestos in Buildings: detailed discussion of the "Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/585-030a October 1985);" techniques to ensure that sampling is randomly distributed for other than friable surfacing materials; sampling of nonfriable materials; techniques for bulk sampling; sampling equipment the inspector should use; additional sampling requirements and chain-of-custody forms if litigation is anticipated; patching or repair of damage done in sampling; an inspector's repair kit; discussion of polarized light microscopy; choosing an accredited laboratory to analyze bulk samples; quality control and quality assurance procedures. The department recommends that all samples be analyzed by a laboratory that meets the requirements of LAC 33:I.Subpart 3.Chapters 45-59.
- j. Inspector Respiratory Protection and Personal Protective Equipment: classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-mouth seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing

procedures and their applicability; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; and use, storage, and handling of nondisposable clothing.

- k. Recordkeeping and Writing the Inspection Report: labeling of samples and keying sample identification to sampling location; recommendations on sample labeling; detailing of ACM inventory; photographs of selected sampling areas and examples of ACM condition; information required for inclusion in the management plan by LAC 33:III.2723.
- 1. Regulatory Review: EPA Worker Protection Rule in 40 CFR 763, subpart G, TSCA title II; OSHA asbestos construction standard 29 CFR 1926.1101 et seq.; OSHA respirator requirements found at 29 CFR 1910.134 et seq.; the Asbestos-Containing Materials in Schools and State Buildings Regulation found at LAC 33:III.Chapter 27; LAC 33:III.Chapter 51, Subchapter M; and differences in federal/state requirements where they apply and the effects, if any, on public and nonpublic schools, state and commercial or public buildings.
- m. Field Trip: inclusion of a field exercise including a walk-through inspection; on-site discussion on information gathering and determination of sampling locations; on-site practice in physical assessment; classroom discussion of field exercise.
- n. Course Review: review of key aspects of the training course.
- 2. Management Planners. All persons who prepare management plans for facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools and state buildings shall be trained in accordance with this Section and accredited by the department. Possession of current and valid inspector accreditation shall be a prerequisite for admission to the management planner training course. All persons seeking accreditation as management planners shall complete an inspection training course as outlined above and a two-day management planning training course. The two-day training program shall include lectures, demonstration, course review, and a written examination. The use of audiovisual materials is recommended to complement lectures, where appropriate. The management planner training course shall adequately address the following topics.
- a. Course Overview: the role of the management planner; operations and maintenance programs; setting work priorities; protecting building occupants.
- b. Evaluation/Interpretation of Survey Results: review of TSCA Title II requirements for inspection and management plans as given in LAC 33:III.2723; summarized field data and laboratory results; comparison of field inspector's data sheet with laboratory results and site survey.

- c. Hazard Assessment: amplification of the difference between physical assessment and hazard assessment; the role of the management planner in hazard assessment; explanation of significant damage, damage, potential damage, and potential significant damage; use of a description (or decision tree) code for assessment of ACM; assessment of friable ACM; relationship of accessibility, vibration sources, use of adjoining space, and air plenums and other factors to hazard assessment.
- d. Legal Implications: liability; insurance issues specific to planners; liabilities associated with interim control measures, in-house maintenance, repair, and removal; use of results from previously performed inspections.
- e. Evaluation and Selection of Control Options: overview of encapsulation, enclosure, interim operations and maintenance, and removal; advantages and disadvantages of each method; response actions described via a decision tree or other appropriate method; work practices for each response action; staging and prioritizing of work in both vacant and occupied buildings; the need for containment barriers and decontamination in response actions.
- f. Roles of Other Professionals: use of industrial hygienists, engineers, and architects in developing technical specifications for response actions; any requirements that may exist for architect sign-off of plans; team approach to design of high-quality job specifications.
- g. Developing an Operations and Maintenance (O and M) Plan: purpose of the plan; discussion of applicable EPA guidance documents; what actions should be taken by custodial staff; proper cleaning procedures; steam cleaning and high-efficiency particulate aerosol (HEPA) vacuuming; reducing disturbance of ACM; scheduling O and M for offhours; rescheduling or canceling renovation in areas with ACM; boiler room maintenance; disposal of ACM; in-house ACM—bridging procedures for and penetrating encapsulants; pipe fittings; metal sleeves; polyvinyl chloride (PVC), canvas, and wet wraps; muslin with straps; fiber mesh cloth; mineral wool, and insulating cement; discussion of employee protection programs and staff training; case study in developing an O and M plan (development, implementation process, and problems that have been experienced).
- h. Regulatory Review: focusing on the OSHA Asbestos Construction Standard 29 CFR 1926.1101 et seq.; LAC 33:III.Chapter 51, Subchapter M; LAC 33:III.Chapter 27; EPA Worker Protection Rule in 40 CFR 763, subpart G.
- i. Recordkeeping for the Management Planner: use of field inspector's data sheet along with laboratory results; ongoing recordkeeping as a means of tracking asbestos disturbance; procedures for recordkeeping.
- j. Assembling and Submitting the Management Plan: plan requirements in LAC 33:III.2723; the management plan as a planning tool; the proper completion and submittal of required elements for management plans, Form AAC-8.

- k. Financing Abatement Actions: economic analysis and cost estimates; development of cost estimates; present costs of abatement versus future operations and maintenance costs; Asbestos School Hazard Abatement Act grants and loans.
- 1. Course Review: review of key aspects of the training course.

NOTE: Persons who perform the management planner role in public and commercial buildings are not required to be accredited. However, persons may find this training and accreditation helpful in preparing them to design or administer asbestos operations and maintenance programs for public and commercial buildings.

- 3. Abatement Project Designers. A person shall be trained in accordance with this Section and accredited by the department as a project designer to design any of the following activities with respect to RACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to a school or state building: a response action other than a SSSD maintenance activity, a maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity, or a response action for a major fiber release episode. All persons seeking accreditation as abatement project designers shall complete a three-day abatement project designer training course as outlined below. The three-day abatement project designer training program shall include lectures, demonstrations, a field trip, course review, and a written examination. The use of audiovisual materials to complement lecturers, where appropriate, is recommended. The three-day abatement project designer training course shall adequately address the following topics.
- a. Background Information on Asbestos: identification of asbestos; examples and discussion of the uses and locations of asbestos in buildings; physical appearance of asbestos.
- b. Potential Health Effects Related to Asbestos Exposure: nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency period of asbestos-related diseases; a discussion of the relationship between asbestos exposure and asbestosis, lung cancer, mesothelioma, and cancer of other organs.
- c. Overview of Abatement Construction Projects: abatement as a portion of a renovation project; OSHA requirements for notification of other contractors on a multi-employer site (29 CFR 1926.1101(d)).
- d. Safety System Design Specifications: construction and maintenance of containment barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lock-out; proper working techniques for minimizing fiber release; entry and exit procedures for the work area; use of wet methods; use of negative pressure exhaust ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper cleanup and disposal of asbestos; work practices as they

apply to encapsulation, enclosure, and repair; use of glove bags and a demonstration of glove-bag use.

- e. Field Trip: visit to an abatement site or other suitable building site, including on-site discussions of abatement design, building walk-through inspection, and discussion of rationale for the concept of functional spaces during the walk-through.
- f. Employee Personal Protective Equipment: the classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance, and storage procedures; methods for field testing of the facepiece-to-face seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); components of a proper respiratory protection program; selection and use of personal protective clothing, including use, storage, and handling of nondisposable regulations covering personal clothing; protective equipment.
- g. Additional Safety Hazards: hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire, and explosion hazards.
- h. Fiber Aerodynamics and Control: aerodynamic characteristics of asbestos fibers; importance of proper containment barriers; settling time for asbestos fibers; wet methods in abatement; aggressive air monitoring after abatement; aggressive air movement and negative pressure exhaust ventilation as a cleanup method.
- i. Designing Abatement Solutions: discussions of removal, enclosure, and encapsulation methods; asbestos waste disposal.
- j. Final Clearance Process: discussion of the need for a written sampling rationale for aggressive final air clearance; requirements of a complete visual inspection; the relationship of the visual inspection to final air clearance; and discussion of the use of TEM analysis in the final clearance process.
- k. Budgeting/Cost Estimation: development of cost estimates; present costs of abatement versus future operations and maintenance costs; setting priorities for abatement jobs to reduce cost.
- 1. Writing Abatement Specifications: preparation of and need for a written project design; means and methods specifications versus performance specifications; design of abatement in occupied buildings; modification of guide specifications to fit a particular building; worker and building occupant health/medical considerations; replacement of ACM with nonasbestos substitutes; clearance of work area after abatement; air monitoring for clearance.
- m. Preparing Abatement Drawings: significance and need for drawings, use of as-built drawings; use of inspection photographs and on-site reports; methods of preparing abatement drawings; diagramming containment

barriers; relationship of drawings to design specifications; particular problems with abatement drawings.

- n. Contract Preparation and Administration
- o. Legal/Liabilities/Defenses: insurance considerations; bonding; hold harmless clauses; use of abatement contractor's liability insurance; claims-made versus occurrence policies.
- p. Replacement: replacement of asbestos with asbestos-free substitutes.
- q. Roles of Other Consultants: development of technical specification sections by industrial hygienists or engineers; the multidisciplinary team approach to abatement design.
- r. Occupied Buildings: special design procedures required in occupied buildings; education of occupants; extra monitoring recommendations; staging of work to minimize occupant exposure; scheduling of renovation to minimize exposure.
- s. Relevant Federal, State, and Local Regulatory Requirements: procedures and standards, including:
 - i. requirements of TSCA title II;
- ii. LAC 33:III.Chapter 51, Subchapter M, Asbestos;
- iii. LAC 33:III.Chapter 27, Asbestos-Containing Material in Schools and Public Buildings;
- iv. OSHA standards for permissible exposure to airborne concentrations of asbestos fibers and respiratory protection (29 CFR 1910.1001(c) or 29 CFR 1926.1101(c), whichever is applicable);
- v. Worker protection rule, in 40 CFR 763 subpart G; and
- vi. OSHA asbestos construction standard in 29 CFR 1926.1101 et seq., and OSHA hazard communication standard found at 29 CFR 1910.1200.
- t. Course Review: a review of key aspects of the training course.
- 4. Asbestos Abatement Contractor/Supervisors. A person shall be trained in accordance with this Section and accredited by the department as a contractor/supervisor to supervise any of the following activities with respect to RACM in facilities regulated under LAC.33.III.Chapters 27 and 51, including but not limited to a school or state building,: a response action other than a SSSD activity, a maintenance activity that disturbs RACM other than a SSSD activity, or a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement supervisors shall complete a five-day training course as outlined below. The training course shall include lectures, demonstrations, at least 14 training hours of handson training, individual respirator fit testing, course review, and a written examination. The hands-on training shall include abatement work activities to include working with asbestos-substitute materials, the use of glove bags and

protective clothing, proper bagging and wrapping, and constructing a decontamination unit. The use of audiovisual materials is recommended to complement lectures, where appropriate. For purposes of Louisiana state accreditation, asbestos abatement supervisors include those persons who provide supervision and direction to workers engaged in asbestos removal, encapsulation, enclosure, or repair. Supervisors may include those individuals with the position title of foreman, working foreman, or leadman pursuant to collective bargaining agreements. At least one supervisor is required to be at the worksite at all times while work is in progress. Asbestos workers must have access to accredited supervisors throughout the duration of the project. Contracted air-monitoring personnel shall be trained in accordance with this Section and accredited as contractor/supervisor. Hands-on training shall permit supervisors to have actual experience performing tasks associated with asbestos abatement. The supervisor's training course shall adequately address the following topics.

- a. The Physical Characteristics of Asbestos and Asbestos-Containing Materials: identification of asbestos; aerodynamic characteristics; typical uses; physical appearance; a review of hazard assessment considerations; summary of abatement control options.
- b. Potential Health Effects Related to Asbestos Exposure: the nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; synergism between cigarette smoking and asbestos exposure; latency period for disease.
- c. Employee Personal Protective Equipment: classes and characteristics of respirator types; limitations of respirators and their proper selection, inspection, donning, use, maintenance, and storage procedures; methods for field testing of the facepiece-to-face seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing, including use, storage, and handling of nondisposable clothing; regulations covering personal protective equipment.
- d. State-of-the-Art Work Practices: proper work practices for asbestos abatement activities, including descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lockout; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper cleanup and disposal procedures, including bagging and wrapping; work practices for removal, encapsulation, enclosure, and repair; emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; recommended and prohibited work practices. Discussion of new abatement-related techniques and methodologies may be included.

- e. Personal Hygiene: entry and exit procedures for the work area; use of showers; avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area. Potential exposures, such as family exposure, shall also be included.
- f. Additional Safety Hazards: hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards, scaffold and ladder hazards, slips, trips, and falls, and confined spaces.
- g. Medical Monitoring: OSHA and EPA Worker protection rule requirements for physical examinations, including a pulmonary function test, chest x-rays, and a medical history for each employee.
- h. Air Monitoring: procedures to determine airborne concentrations of asbestos fibers, including a description of aggressive sampling, sampling equipment and methods, reasons for air monitoring, types of samples, and interpretation of results, specifically from analysis performed by polarized light, phase-contrast, and electron microscopy analyses.
- i. Relevant Federal, State, and Local Regulatory Requirements: procedures and standards, including:
 - i. requirements of TSCA title II;
- ii. LAC 33:III.Chapter 51, Subchapter M. Asbestos;
- iii. LAC 33:III.Chapter 27, Asbestos-Containing Material in Schools and State Buildings regulation;
- iv. OSHA standards for permissible exposure to airborne concentrations of asbestos fibers (29 CFR 1910.1001(c)), 29 CFR 1926.1101(c) and respiratory protection (29 CFR 1910.134 et seq.);
- v. OSHA asbestos construction standard (29 CFR 1926.1101 et seq.; and
 - vi. 40 CFR 763 subpart G, worker protection rule.
- j. Respiratory protection programs and medical surveillance programs:
- i. OSHA standards for respiratory protection (29 CFR 1910.134 et seq.);
- ii. OSHA protection factors for respirators (29 CFR 1910.1001(g) et seq. and medical surveillance (29 CFR 1926.1101(m); and
- iii. EPA protection factors for respirators (40 CFR 763.122).
- k. Insurance and Liability Issues: contractor issues; worker's compensation coverage and exclusions; third-party liabilities and defenses; insurance coverage and exclusions.
- l. Recordkeeping for Asbestos Abatement Projects: records required by federal, state, and local regulations; records recommended for legal and insurance purposes.

- m. Supervisory Techniques for Asbestos Abatement Activities: supervisory practices to enforce and reinforce the required work practices and discourage unsafe work practices.
- n. Contract Specifications: discussion of key elements that are included in contract specifications.
- o. Course Review: review of key aspects of the training course.
- 5. Asbestos Abatement Workers. A person shall be trained in accordance with this Section and accredited as a worker by the department to carry out any of the following activities with respect to RACM in facilities regulated under LAC.33.III. Chapters 27 and 51, including but not limited to a school or state building: response action other than a SSSD activity, a maintenance activity that disturbs RACM other than a SSSD activity, or a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement workers shall complete at least a fourday training course as outlined below. The worker training course shall include lectures, demonstrations, at least 14 training hours of hands-on training, individual respirator fit testing, course review, and an examination. The hands-on training shall include abatement work activities to include working with asbestos-substitute materials, the use of glove bags and protective clothing, proper bagging and wrapping, and constructing a decontamination unit. The use of audiovisual materials is recommended to complement lectures, where appropriate. Hands-on training shall permit workers to have actual experience performing tasks associated with asbestos abatement. A person who is otherwise accredited as a contractor/supervisor may perform in the role of a worker without possessing separate accreditation as a worker. The training course shall adequately address the following topics.
- a. Physical Characteristics of Asbestos: identification of asbestos, aerodynamic characteristics, typical uses, and physical appearance, and a summary of abatement control options.
- b. Potential Health Effects Related to Asbestos Exposure: the nature of asbestos-related diseases, routes of exposure, dose-response relationships, and the lack of a safe exposure level; synergism between cigarette smoking and asbestos exposure; latency period for disease and a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs.
- c. Employee Personal Protective Equipment: classes and characteristics of respirator types; limitations of respirators and their proper selection, inspection, donning, use, maintenance, and storage procedures; methods for field testing of the facepiece-to-face seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing;

- use, storage, and handling of nondisposable clothing; and regulations covering personal protective equipment.
- d. State-of-the-Art Work Practices: proper work practices for asbestos abatement activities including descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lockout; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper cleanup and disposal procedures including wrapping and bagging; work practices for removal, encapsulation, enclosure, and repair, emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices.
- e. Personal Hygiene: entry and exit procedures for the work area; use of showers; avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area; potential exposures, such as family exposure.
- f. Additional Safety Hazards: hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards, scaffold and ladder hazards, slips, trips, falls, and confined spaces.
- g. Medical Monitoring: OSHA and EPA Worker Protection Rule requirements for a pulmonary function test, chest x-rays, and a medical history for each employee.
- h. Air Monitoring: procedures to determine airborne concentrations of asbestos fibers, focusing on how personal air sampling is performed and the reasons for it.
- i. Relevant Federal, State and Local Regulatory Requirements, Procedures, and Standards: particular attention directed at relevant EPA, OSHA, and state regulations concerning asbestos abatement workers.
 - j. Establishment of respiratory protection programs.
- k. Course Review: review of key aspects of the training course.
- C. Examination. A closed-book examination shall be given to all persons seeking accreditation who have completed an initial training course. A person seeking accreditation in a specific discipline shall pass the examination for that discipline prior to receiving a training certificate. For example, a person seeking accreditation as an inspector must pass the inspector's accreditation examination given by the training provider. Each examination shall adequately cover the topics included in the training course for that discipline. Persons who pass and fulfill other associated requirements will receive a certificate indicating that they are trained in a specific discipline. The following are the requirements for examinations in each area:
 - 1. inspectors:
 - a. 50 multiple choice questions;
 - b. passing score—70 percent;

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- 2. management planners:
 - a. 50 multiple choice questions;
 - b. passing score—70 percent;
- 3. abatement project designers:
 - a. 100 multiple choice questions;
 - b. passing score—70 percent;
- 4. asbestos abatement contractors and supervisors:
 - a. 100 multiple choice questions;
 - b. passing score—70 percent;
- 5. asbestos abatement workers:
 - a. 50 multiple choice questions;
 - b. passing score—70 percent.
- D. Refresher Training Courses. The refresher course shall be specific to each discipline. Refresher courses shall be conducted as separate and distinct courses and not combined with any other training during the period of the refresher course.
- 1. For all disciplines except inspectors, a one-day annual refresher training course is required for reaccreditation.
- 2. Refresher courses for inspectors shall be a half-day length.
- 3. Management planners shall attend the inspector refresher course, plus an additional half-day on management planning.
- 4. For each discipline, the refresher course shall review and discuss changes in federal and state regulations, developments in state-of-the-art procedures, and a review of key aspects of the initial training courses.
- 5. After completing the annual refresher course, persons shall have their training extended an additional year. If a refresher course is not completed within two years of the last course completion date, the initial training course has to be retaken for reaccreditation.
- E. Qualifications. In addition to training and an examination, inspectors, management planners, and abatement project designers shall meet the requirements listed below.
- 1. Inspectors. Qualifications—possess a high school diploma or GED.
 - 2. Management Planners. Qualifications:
- a. a certification, registration, or license to practice as an architect, professional engineer, or certified industrial hygienist;
 - b. bachelor's degree in a related scientific field; or
- c. a bachelor's degree and five years experience related to assessments and abatement projects in schools and state buildings as an accredited asbestos inspector.

- 3. Abatement Project Designer. Qualifications:
- a. a certification, registration or license to practice as an architect, professional engineer, or certified industrial hygienist.

F. Accreditation of Agents

- 1. Accreditation is required for:
- a. persons who inspect for the presence of asbestos in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools and/or state buildings;
- b. persons who develop management plans for schools and/or state buildings, or those buildings used or leased by the state;
- c. persons who design or carry out response actions for facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools and/or state buildings involving RACM (other than SSSD);
- d. persons contracted to perform air monitoring in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools and state buildings;
- e. persons contracted to strip, remove, or otherwise handle or disturb RACM in facilities regulated under LAC 33:III.Chapters 27 and 51, including but not limited to schools, or state buildings.
- 2. Application for Accreditation. The applicant for accreditation shall submit the following items:
- a. the latest version of a completed and legible asbestos accreditation affidavit, Form AAC-1 (which may be obtained from the Office of Environmental Services or through the department's website) that contains:
- i. the applicant's name, address, telephone number, fax number, and email address;
- ii. the applicant's driver's license or state identification number and the issuing state;
- iii. the name, address, telephone number, fax number, and email address of the applicant's employer;
- iv. an identification of the disciplines in which accreditation is sought;
- v. Form AAC-1 statement of regulation possession, knowledge and enforceability;
- vi. the applicant's previous agency interest number (AI #), if applicable; and
- vii. the applicant's signature and the date of application;
- b. a copy of the current class training certificate. First-time applicants shall also submit copies of initial training and all subsequent refresher (update) certificates;
- i. the training course(s) shall have at least contingent approval from EPA or be approved by a state authorized by the EPA to approve training courses;

- ii. applicants seeking accreditation from Louisiana that received current training from providers recognized by EPA or an EPA-authorized state not recognized by Louisiana shall also submit proof of a current two-hour training course in current Louisiana regulations from a Louisiana RATP (reciprocity);
- c. applications for inspector, management planner, and project designer shall include, where applicable:
- i. a copy of a high school diploma, general educational development (GED) certificate or documentation of the highest level of education achieved (including as necessary, a bachelor's degree in a related field);
- ii. a copy of proof of certification registration or license to practice as an architect, certified industrial hygienist, or a professional engineer;
 - d. applicable fees as noted in LAC 33:III.223;
- e. a 1" x 1 1/4" photograph of the applicant's face (front view) labeled with their name.
- 3. The completed application with applicable fees (LAC 33:III.223) shall be sent to the Office of Environmental Services.
- 4. Persons shall be considered accredited upon receipt of a certificate of accreditation or identification card issued by the department.

5. Approved Applications

- a. Accreditation numbers shall be issued to all approved agents.
- b. A qualified individual seeking accreditation shall be issued accreditation certificates, which expire one year after the last day of his or her most recent training course.

6. Renewal of Accreditation

- a. To renew accreditation, all persons shall submit an application in accordance with the requirements of Paragraph F.2 of this Appendix.
- b. A qualified individual shall maintain continuous accreditation provided the individual submits the required documents at least 30 days prior to his or her expiration/renewal date.
- i. If an individual seeking reaccreditation has received refresher training within 90 days prior to his or her existing expiration/renewal date, his or her accreditation shall be extended for one year from the existing expiration/renewal date.
- ii. If an individual seeking reaccreditation has received refresher training earlier than 90 days prior to his or her existing expiration/renewal date, his or her new expiration/renewal date will be one year after the last day of his or her most current training.
- c. If a qualified individual does not submit an application for renewal within the time provided in Subparagraph F.6.b of this Appendix, his or her accreditation

- will lapse at the expiration of the term of the accreditation. A qualified individual may be reaccredited upon an application for renewal in accordance with Subparagraph F.6.a of this Appendix. The accreditation expiration/renewal date will be one year after the last day of his or her most current training, provided the applicant has received refresher training within two years of the last course completion date. If a refresher is not taken within two years of the last course completion date, the initial training course shall be required for reaccreditation in accordance with Paragraph D.5 of this Appendix.
- 7. Agents who are supervisor accredited are responsible for ensuring that maintenance personnel in schools and state buildings are properly trained as defined in LAC 33:III.2721 and that workers trained to meet LAC 33:III.2739.B.3 are accredited.
- 8. Revocation of Accreditation. Accredited agents may have accreditation revoked for:
- a. failure to comply with or direct others to comply with LAC 33:III.Chapters 27 and 51, and other applicable federal, state, and local regulations;
- b. failure to notify the Office of Environmental Services of changes in status;
- c. failure to operate safely and/or protect the environment;
- d. failure to allow a department representative to inspect and review sites and documentation;
- e. failure to submit valid and accurate accreditation application documents and/or training documents;
- f. performing work requiring accreditation at a job site without evidence of required accreditation which shall include, but not be limited to, current DEQ-issued identification cards or accreditation certificates being available for inspection by the administrative authority at the worksite;
- g. permitting the duplication or use of one's own accreditation certificate by another;
- h. performing work for which accreditation has not been received; and
- i. obtaining training from a training provider that does not have approval to offer training for the particular discipline from either EPA or from a state authorized by EPA that has an accreditation plan at least as stringent as the EPA model accreditation plan (MAP).
- 9. Revocation of accreditation shall be effective for no less than one year.

10. Prohibitions

- a. The alteration or possession of altered certificates is prohibited.
- b. The submission of any false statement, representation, or certification in any form, application,

report, plan, or any other document filed or required to be submitted to/or maintained by the department is prohibited.

- c. A student shall not participate both as a student and as a principal trainer in their own asbestos training courses for certification, and shall not sign their own training certificate.
- G. RATP and Principal Trainers. RATPs and principal trainers shall be recognized by the department prior to conducting training of approved courses in Louisiana. Principal trainers who conduct asbestos courses in Louisiana shall do so in association with a RATP recognized by the department.
- 1. Asbestos training providers requesting recognition shall provide the following:
- a. the latest version of the asbestos training provider recognition application, Form AAC-3, (which may be obtained from the Office of Environmental Services or through the department's website) requesting approval to train asbestos agents;
- b. the latest version of the asbestos trainer recognition application, Form AAC-4, with resumes for principal trainers;
- c. two or more principal trainers shall be listed for each initial training course; and
 - d. appropriate fees (LAC 33:III.223).
- 2. The asbestos training provider recognition application shall, at a minimum, include the following:
- a. the name, address, telephone number, and email address of the training provider's primary offices and the representative serving as the contact for the provider for the scheduling of training courses and for other training activities:
- b. the signature of a responsible official for the training provider; and
 - c. information on the specific courses including:
- i. course discipline (e.g., worker, contractor/supervisor, inspector, etc.);
 - ii. course type (i.e., initial or refresher);
- iii. the language in which the course will be taught;
- iv. all addresses of the physical locations where courses will be held during the year;
- v. a description of the facility where the classes will be held (e.g., warehouse, industrial building, etc.);
- vi. copies of the latest version of training materials including texts, syllabi, and outlines, but not including exams:
- (a). if the latest version of training material was submitted with the last application, a note to that effect is sufficient;

- (b). the training material shall be provided in the language it will be taught; and
- (c). the department reserves the right to request a copy of the training material at any time;
- vii. a detailed statement about the development of the examination used in the course. The statement shall include, but is not limited to:
 - (a). the number of questions for each exam;
 - (b). the topics covered in the exam; and
- (c). the number of questions specifically relating to Louisiana regulations; and
- viii. a detailed statement clearly indicating how the course meets the requirements of this Appendix for:
 - (a). length of training days;
 - (b). amount and type of hands-on training;
- (c). examination (e.g., length, format, passing score);
 - (d). topics covered in the course;
- (e). a copy of an example training completion certificate; and
- (f). a copy of the EPA letter recognizing approval of the training provider's course or approval from a state authorized by EPA to approve training courses, if applicable.
 - 3. Trainers seeking recognition shall submit:
- a. the latest version of the asbestos trainer recognition form, AAC-4;
 - b. appropriate fees (LAC 33:III.223);
- c. a resume indicating proof of experience in the subjects they will teach which includes the following experience requirements:
- i. a degree or training certification in the subject being taught; and
 - ii. experience in the field for two or more years;
- d. a person experienced as a supervisor/contractor is also considered experienced as a worker.
 - 4. Training Providers and Trainers Recognition
- a. Training providers and trainers shall be considered recognized upon written confirmation from the department or upon receipt of a certificate of recognition from the department.
- b. Training recognition numbers will be issued to all recognized training providers and principal trainers. The recognition is effective for one year from the date issued.
- c. Recognition of training providers and trainers may be renewed annually by submitting the latest revision of Forms AAC-3 and AAC-4 respectively along with all

appropriate updates to the information required for the application and the applicable fees to the department.

- 5. Applications for training provider and trainer recognition may be denied for:
 - a. incomplete applications;
 - b. inaccurate or falsified information;
 - c. incomplete supporting documentation;
- d. failure to comply with applicable federal, state, and local regulations, which includes nonpayment of fees or a history of noncompliance with LAC 33:III.Chapters 27 and 51; and
- e. at the discretion of the department based on past compliance history.
- 6. Training courses will be given contingent approval based upon the review of course materials and inclusion of those topics required under Subsection B of this Appendix when applicable. Full approval may be given upon completion of an audit of the courses.
- 7. Recognition for a training course may be denied if the training provider fails to:
- a. comply with the course requirements outlined in LAC 33:III.274.B; and
- b. comply with the notification requirements outlined in LAC 33:III.2741.B.
- 8. Compliance and Enforcement. A recognized training provider or recognized trainer may have their recognition withdrawn or revoked for one or more years according to one or more of the following criteria:
- a. failure to issue certificates which includes the information required by these regulations;
- b. failure to ensure that the training materials are applicable to the class taught, and are included in the latest material submitted to the department as part of the initial or renewal application;
- c. failure to ensure that the training material includes the most current version of the DEQ forms, obtained from the department website;
- d. failure to ensure that the Office of Environmental Services is informed of any change in status of the training organization, such as pending fines, notices of violation, changes in principal trainer status, etc;
- e. failure to ensure that a timely notification of courses that will be taught, including where, when, and who will conduct the class, or that a cancellation of classes is received by the Office of Environmental Services before the class should have commenced;
- f. failure to ensure that an accurate, timely, and complete roster is received by the Office of Environmental Services;
- g. misrepresentation of the extent of a training course's approval by a state or EPA;

- h. failure to submit required information or notifications in a timely manner;
 - i. failure to maintain requisite records;
- j. falsification of recognition or accreditation records, trainer qualifications, or other information;
- k. falsification of any information regarding the principal trainer and course location on the notification or roster;
- 1. misrepresenting the contents of a training course to the department and/or the student population;
- m. making false or misleading statements to the department, EPA, or another state in its application for recognition;
- n. failure to adhere to the training standards and requirements of the agent accreditation plan and the EPA MAP; and/or
- o. failure to meet any of the requirements of this Appendix.
- 9. Three violations of any of the requirements of this Subsection will result in the training provider or principal trainer permanently losing their recognition to teach courses in Louisiana.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2344 and 40:1749.1.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 15:735 (September 1989), amended LR 16:397 (May 1990), LR 16:1057 (December 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:649 (June 1994), LR 22:700 (August 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2458 (November 2000), amended by the Office of Environmental Assessment, LR 30:2022 (September 2004), LR 30:2803 (December 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2444 (October 2005), LR 33:2090 (October 2007), amended by the Office of the Secretary, Legal Division, LR 40:510 (March 2014).

ENVIRONMENTAL QUALITY

Subchapter M. Asbestos

§5151. Emission Standard for Asbestos

- A. Applicability. The provisions of this Subchapter are applicable to those sources specified in Subsections C-O of this Section.
- B. Definitions. Terms used in this Section are defined in LAC 33:III.111 of these regulations with the exception of those terms specifically defined in LAC 33:III.5103 or below, as follows.

Accessible—asbestos-containing material that is subject to disturbance by facility occupants, custodial or maintenance personnel in the course of their normal activities. Accessible also refers to asbestos-containing material that is available for examination and sampling purposes prior to a demolition or renovation.

Accredited or Accreditation—when referring to a person, the accreditation of such person by the Department of Environmental Quality under the provisions of LAC 33:III.2799, Appendix A—Agent Accreditation Plan.

Active Waste Disposal Site—any disposal site other than an inactive site.

Adequately Wet—sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing materials, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet. Once contained, water droplets formed inside disposal containers will be sufficient evidence of being adequately wet. Lack of water droplets means it is not adequately wet.

Asbestos—the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, and actinolite-tremolite.

Asbestos-Containing Material (ACM)—any material or product that contains more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy.

Asbestos-Containing Waste Material (ACWM)—mill tailings or any waste that contains commercial or previously commercial asbestos and is generated by a source subject to the provisions of this Subchapter. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos, including ACD, and disposable equipment and clothing.

Asbestos-Contaminated Debris (ACD)—demolition or renovation debris that contains regulated asbestos-containing material as defined in this Subsection.

Asbestos-Contaminated Debris Activity (ACDA)—the handling and/or disposal of asbestos-contaminated debris as RACM.

Asbestos Material—asbestos or any material or product which contains more than 1 percent asbestos.

Asbestos Mill—any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.

Asbestos Tailing—any solid waste product that contains asbestos and is a product of asbestos mining or milling operations.

Asbestos-Containing Waste Material (ACWM)—mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this Subchapter. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos, including disposable equipment and clothing.

Category I Nonfriable (ACM)—asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Category II Nonfriable ACM—any material, excluding category I nonfriable ACM, containing more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Commercial Asbestos—any material containing asbestos that is extracted from asbestos ore and has value because of its asbestos content.

Cutting—to penetrate with a sharp-edged instrument, including sawing, but not including shearing, slicing, or punching.

Demolition—the permanent wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

DEQ Identification Number—the accreditation number supplied by the administrative authority which authorizes a contractor/supervisor to manage an asbestos demolition or renovation project which involves RACM (regulated asbestos-containing material).

Emergency Demolition/Renovation Operation—a demolition or renovation operation that was not planned but results from a sudden unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is

necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

Encapsulation—the treatment of asbestos material with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers by the encapsulant creating a membrane over the surface (bridging encapsulant) or penetrating the material and binding its components together (penetrating encapsulant).

Enclosure—an airtight, impermeable, barrier placed around *ACM* during activities that disturb asbestos to prevent the release of asbestos fibers into the ambient air.

Fabricating—any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

institutional, Facility—any commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, and residential buildings having greater than four dwelling units); any ship; and any active or inactive waste disposal, or ACD site. Residential buildings that have four or fewer dwelling units are exempt from the provisions of this Subchapter, except those residential structures that are intentionally demolished or renovated as part of a commercial or public project, such as urban renewal or highway right-of-way projects and those that are intentionally burned. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this Subchapter is not excluded, regardless of its current use or function.

Facility Component—any part of a facility, including equipment, that is under the control of an owner or operator.

Fiber Release Episode—any uncontrolled or unintentional disturbance of *ACM*.

Friable Asbestos Material—any material containing more than 1 percent asbestos as determined by using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM, or assume the amount to be greater than 1 percent and treat the material as ACM.

Fugitive Source—any source of emissions not controlled by an air pollution control device.

Glove Bag—a sealed compartment with attached inner gloves used for the handling of ACM. Properly installed and

used, *glove bags* provide a small work area enclosure typically used for small-scale asbestos stripping operations.

- a. They are limited to one use on a work area or section of pipe that is shorter than the bag is wide.
 - b. The bag shall be disposed of after its single use.
- c. No person shall loosen a bag once installed, slide the bag along a working surface or section of pipe and use the bag for a second work area or section of pipe.
- d. Any deviation from single use of a *glove bag* requires prior written approval of the administrative authority. Additional information on *glove bag* installation, equipment and supplies, and work practices can be obtained from the Occupational Safety and Health Administration's (OSHA's) final Rule on occupational exposure to asbestos (29 CFR 1926.1101(g)).

Grinding—to reduce to powder or small fragments, including mechanical chipping or drilling.

High Efficiency Particulate Air (HEPA) Filter—a filtering system certified by the manufacturer as being capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 microns in diameter or larger.

In Poor Condition—the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

Inactive Waste Disposal Site—any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

Inspection or Inspect—an examination of a facility or facility component to determine the presence or location, or to assess the condition of friable or nonfriable asbestos material, or suspected asbestos material, whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of assumed asbestos material and friable and nonfriable asbestos material which has been previously identified. The term does not include the following:

- a. periodic surveillance of the type described in LAC 33:III.2721.B solely for the purpose of recording or reporting a change in the condition of known or assumed asbestos material;
- b. inspections performed by employees or agents of federal, state, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or
- c. visual inspections of the type described in LAC 33:III.2717.J solely for the purpose of determining completion of response actions.

Installation—any building or structure or any group of buildings or structures at a single demolition or renovation site that part of a planned project that are under the control of the same owner or operator (or owner or operator under common control).

Leak Tight—solids or liquids cannot escape or spill out. It also means *dust-tight*.

Major Fiber Release Episode—any uncontrolled or unintentional disturbance of asbestos material which involves the falling or dislodging of more than 3 square or 3 linear feet of friable asbestos material.

Malfunction—any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

Manufacturing—the combining of commercial asbestos (in the case of woven friction products, the combining of textiles containing commercial asbestos) with any other material(s), including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

Natural Barrier—a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes, or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

Nonfriable Asbestos-Containing Material—any material containing more than one percent asbestos as determined by the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Nonscheduled Operation—a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operation experience, but for which an exact date cannot be predicted. Diaphragm cell renewal is considered a nonscheduled operation.

Outside Air—the air outside buildings, structures, or enclosures, including, but not limited to, the air under a bridge, in an open air ferry dock, or air outside demolition or renovation construction activities or enclosures.

Owner or Operator of a Demolition, Renovation, Response Action or ACD Activity (owner/operator)—any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated, or an ACDA or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both, response action, or an ACDA

Particulate Asbestos Material—finely divided particles of asbestos or material containing asbestos.

Planned Operation—a demolition and/or renovation operation, or a number of such operations, in which RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

Recognized Asbestos Landfill (RAL)—a waste disposal site recognized by DEQ, Office of Environmental Services after receipt of an asbestos landfill recognition form (AAC-7). An in-state landfill shall comply with Subsection N of this Section and be permitted or authorized to accept ACWM. An out-of-state landfill shall be subject to 40 CFR part 61.154 or another state's applicable regulation that EPA has determined to be at least as stringent as §61.154.

Regulated Asbestos-Containing Material (RACM)—

- a. friable asbestos material;
- b. *category I* and *II nonfriable ACM* that has become friable such as asbestos-cement material that is not removed from a facility prior to demolition;
- c. category I and II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, ground, sanded, cut, abraded, or reduced to powder by the forces that have acted or are expected to act on the material in the course of demolition or renovation operations; or
- d. resilient floor covering or the asbestos-containing mastic used to attach it to the floor surface that is scraped, sanded, abraded, bead blasted, cut, ground, crumbled, pulverized, or reduced to powder by any means, either hand or mechanical equipment. This definition does not include resilient floor covering removed by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact (minor tears or minor breakage is acceptable where, for all intents and purposes, the flooring is considered whole) or asbestos-containing mastic that has been removed by chemical or other means that results in the asbestos fibers in ACWM being bound within a macro substrate and cannot reasonably become airborne unless further forces are applied.

Remove—to take out *RACM* or facility components that contain or are covered with *RACM*.

Renovation—altering a facility or one or more facility components in any way, including the washing, stripping, or removal of *RACM* from a facility component. Operations in which load-supporting structural members are wrecked or taken out are *demolitions*.

Resilient Floor Covering—asbestos-containing floor tiles, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent *asbestos* as determined by using polarized light microscopy according to the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy.

Response Action—a method, including actions during demolition or renovation that provides for removal, encapsulation, enclosure, repair, and operations and maintenance activities, that protects human health and the environment from RACM.

Roadways—surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

Strip—to take off RACM from any part of a facility or facility components.

Structural Member—any load-supporting member of a facility such as beams and load-supporting walls; or any non-load-supporting member, such as ceilings, roofs and non-load-supporting walls.

Urban Renewal—demolitions or renovations of blighted or condemned properties authorized or conducted by government entities (city, parish, or state) as part of commercial or public projects.

Visible Emissions—any emissions, which are visually detectable without the aid of instruments, coming from RACM or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.

Waste from Asbestos Control Devices—any waste material that is placed or collected in asbestos control equipment.

Waste Generator—any owner or operator of a source covered by this Subchapter whose act or process produces asbestos-containing waste material.

Waste Shipment Record—the shipping document, asbestos disposal verification form, (ADVF), required to be originated and signed by the waste generator or the owner or operator of a demolition, renovation, response action or ACD activity, used to track and substantiate the disposition of asbestos-containing waste material to an RAL.

Wet Methods—for resilient floor coverings, wetting sufficiently to cause the coverings to break loose or lift from the substrate in whole pieces.

Work Area Controls—work practices and engineering procedures that shall be used when removing RACM, as outlined in OSHA 29 CFR 1926.1101.g.

Working Day—Monday-Friday, including holidays that fall on any of the days Monday-Friday.

C. Standard for Asbestos Mills

1. Each owner or operator of an asbestos mill shall either discharge no visible emissions to the outside air from that asbestos mill, including fugitive sources, or use the

methods specified in Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

- 2. Each owner or operator of an asbestos mill shall meet the following requirements.
- a. Monitor each potential source of asbestos emissions from any part of the mill facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15-seconds duration per source of emissions.
- b. Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this Subparagraph, submit to the administrative authority, and revise as necessary, a written maintenance plan to include, at a minimum, the following:
 - i. maintenance schedule; and
 - ii. recordkeeping plan.
- c. Maintain records of the results of visible emissions monitoring and air cleaning device inspections using a format similar to the Inspection and Monitoring Record Form, AAC-6, and include the following:
 - i. date and time of each inspection;
 - ii. presence or absence of visible emissions;
- iii. condition of fabric filters, including presence of any tears, holes and abrasions;
- iv. presence of dust deposits on clean side of fabric filters;
- v. brief description of any corrective actions taken, including date and time; and
- vi. daily hours of operation for each air cleaning device.

Inspection and Monitoring Record Form					AAC-6
Date of Inspection (mo/day/yr)	Time of Inspection (a.m./p.m.)	Air Cleaning Device or Fugitive Source Designation or Number	Visible Emissions Observed (yes/no), Corrective Action Taken	Daily Operating Hours	Inspector's Initials
Figure 1. Record of Visible Emission Monitoring					Page 1

d. Furnish upon request, and make available at the affected facility during normal business hours for inspection

by a representative of the administrative authority, all records required under this Subsection.

- e. Retain a copy of all monitoring and inspection records for at least two years.
- f. Submit quarterly a copy of visible emission monitoring records to the administrative authority if visible emissions occurred during the report period. Quarterly reports shall be postmarked by the thirtieth day following the end of the calendar quarter.
- D. Standard for Roadways. No person shall construct or maintain a roadway with asbestos tailings or asbestoscontaining waste material on that roadway, unless, for asbestos tailings:
- 1. it is a temporary roadway on an area of asbestos ore deposits (asbestos mine); or
- 2. it is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or
- 3. it is encapsulated in asphalt concrete meeting the specifications contained in Section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.

E. Standard for Manufacturing and Fabricating

- 1. There shall be no visible emissions to the outside air from any of the following operations that use commercial asbestos or from any building or structure in which such operations are conducted, or from any other fugitive sources:
- a. the manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials;
- b. the manufacture and fabrication of cement products;
- c. the manufacture of fireproofing and insulating materials;
- d. the manufacture and fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles;
 - e. the manufacture of paper, millboard, and felt;
 - f. the manufacture of floor tile;
- g. the manufacture of paints, coatings, caulks, adhesives, and sealants;
 - h. the manufacture of plastics and rubber materials;
- i. the manufacture of chlorine utilizing asbestos diaphragm technology;
 - j. the manufacture of shotgun shell wads;
 - k. the manufacture of asphalt concrete; and
- l. the fabrication of cement or silicate board for ventilation hoods, ovens, electrical panels, laboratory furniture, bulkheads, partitions and ceilings for marine

- construction, and flow control devices for the molten metal industry.
- 2. Use the methods specified by Subsection O of this Section to clean emissions from these operations containing particulate asbestos material before they escape to, or are vented to, the outside air.
- 3. Monitor each potential source of asbestos emissions from any part of the manufacturing or fabricating facility, including air cleaning devices, process equipment, and buildings housing material processing and handling equipment, at least once each day during daylight hours for visible emissions to the outside air during periods of operation. The monitoring shall be visual observation of at least 15 seconds duration per source of emissions.
- 4. Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this Paragraph, submit to the administrative authority, and revise as necessary, a written maintenance plan to include, at a minimum, the following:
 - a. maintenance schedule; and
 - b. recordkeeping plan.
- 5. Maintain records of the results of visible emission monitoring and air cleaning device inspections using the format similar to the Inspection and Monitoring Record Form, AAC-6, and include the following:
 - a. date and time of each inspection;
 - b. presence or absence of visible emissions;
- c. condition of fabric filters, including presence of any tears, holes and abrasions;
- d. presence of dust deposits on clean side of fabric filters:
- e. brief description of corrective actions taken, including date and time; and
- f. daily hours of operation for each air cleaning device.
- 6. Furnish upon request, and make available at the affected facility during normal business hours for inspection by the administrative authority, all records required under this Subsection.
- 7. Retain a copy of all monitoring and inspection records for at least two years.
- 8. Submit quarterly a copy of the visible emission monitoring records to the administrative authority if visible emissions occurred during the report period. Quarterly reports shall be postmarked by the thirtieth day following the end of the calendar quarter.

- F. Emission Standard for Demolition, Renovation, Asbestos-Contaminated Debris Activities, Response Actions and Major Fiber Release Episodes
- 1. Applicability. To determine which requirements of Paragraphs F.1, 2 and 3 of this Section apply to the owner or operator of a demolition, or renovation, response action or ACD activity and prior to the commencement of the activity, the owner/operator shall either assume that RACM, as defined in Subsection B of this Section, is present or an accredited inspector shall thoroughly inspect the affected facility or part of the facility where the activity will occur for the presence of asbestos, including category I and category II nonfriable ACM. All homogeneous areas that potentially contain asbestos shall either be assumed to be ACM or samples shall be collected and submitted for analysis. The requirements of Paragraphs F.2 and 3 of this Section apply to each owner or operator of a demolition, renovation, response action or ACD activity as defined in Subsection B of this Section, as follows.
- a. In a facility being demolished, all the requirements of Subparagraphs F.2.a, b, d, and f, Clauses F.2.c.i and v, and Paragraph F.3 of this Section apply, except when the facility is being demolished under an order by a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse as provided in Subparagraph F.1.c of this Section, if the combined the amount of RACM is:
 - i. at least 60 linear feet on pipes;
- ii. at least 64 square feet on other facility components; or
- iii. at least 27 cubic feet off facility components where the length or area could not be measured previously.
- b. In a facility being demolished, only the notification requirements of Subparagraphs F.2.a and b and Clauses F.2.c.ii and v, d.i-vii, ix, xiv and xvii of this Section apply, if category I or II nonfriable ACM present in the facility will remain in good condition, would not be rendered RACM as a result of the demolition activity (any category I or II nonfriable ACM that may be rendered RACM as a result of the demolition activity, such as asbestos-cement products, must be counted toward the thresholds below), and the combined amount of RACM (including category I or II nonfriable ACM that may be converted to RACM) is:
 - i. less than 60 linear feet on pipes;
- ii. less than 64 square feet on other facility components; or
- iii. less than 27 cubic feet off facility components where the length or area could not be measured previously.
- c. If the facility is being demolished under an order of a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse only the requirements of Subparagraphs F.2.a and b, Clause F.2.c.iii, Subparagraph F.2.d (except Clause F.2.d.viii), Subparagraph F.2.f, and Paragraph F.3 (except Subparagraph F.3.a) of this Section apply.

- d. If a facility is demolished or renovated prior to an inspection or notification, then all debris at the site is categorized as *asbestos-contaminated debris* (ACD), as defined in Subsection B of this Section unless the owner/operator affirmatively demonstrates there is no ACM in the debris. The owner/operator shall follow the procedures and requirements as provided in Subparagraphs F.2.a, b, d, and f and Clauses F.2.c.i and v of this Section, and shall handle and dispose of the debris in accordance with Paragraph F.3 and Subsection J of this Section.
- e. In a facility being renovated, including a response action and any individual nonscheduled renovation operation, all the requirements of Paragraphs F.2 and 3 of this Section apply if:
- i. the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is:
 - (a). at least 60 linear feet on pipes;
- (b). at least 64 square feet on other facility components; or
- (c). at least 27 cubic feet off facility components where the length or area could not be measured previously.
- ii. To determine whether Subclause F.1.e.i.(a), (b), or (c) of this Section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed, stripped dislodged, cut, drilled, or similarly disturbed during a calendar year of January 1 through December 31 based on past operating experience.
- iii. To determine whether Subclause F.1.e.i.(a), (b), or (c) of this Section applies to emergency renovation operations, including those associated with major fiber release episodes and response actions, estimate the combined amount of RACM to be removed, stripped, dislodged, cut, drilled, or similarly disturbed as a result of the sudden, unexpected event that necessitated the renovation.
- iv. If Clause F.1.e.i of this Section is not applicable to the renovation activity, it is exempt from any further requirements of this Section (except to conduct the inspection or assume material is RACM pursuant to Paragraph F.1 of this Section).
- f. Owners or operators of demolition, renovation, response actions and ACD operations are exempt from the requirements of LAC 33:III.5105.A, 5109.E, 5111.A and 5113.A.
- g. Residential structures including those with four and fewer dwelling units that are demolished or renovated as part of a commercial or public project, such as urban renewal or highway right-of-way projects, are considered installations and are subject to the provisions of this Subchapter.
- h. A person contracted to perform a demolition, renovation, or response action which disturbs RACM or conducts ACDA shall comply with any applicable

requirements of the Louisiana State Licensing Board for Contractors to perform asbestos abatement. The supplying of regulated personnel on an hourly, monthly, or other time basis to another company is considered contracting (i.e., abatement workers, supervisors, air monitoring, or project monitoring personnel).

- i. If the activities are emergency demolition operations, all the requirements of Subparagraphs F.2.a, b, d, e, and f, and Paragraph F.3 of this Section apply.
- j. When greater than 64 square feet of either *resilient floor covering*, as defined in Subsection B of this Section, is removed by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact (minor tears or minor breakage is acceptable where, for all intents and purposes, the flooring is considered whole) or asbestos-containing mastic removed by chemical or other means that results in the asbestos fibers in the ACWM being bound within a macro substrate and cannot reasonably become airborne unless further forces are applied, Subparagraphs F.2.a and b, and Clauses F.2.c.vi, d.i-ix, and xv-xvii of this Section apply.
- k. Paragraphs F.2 and 3 of this Section (except Subparagraph F.3.a of this Section) apply to any ACDA.
- l. An asbestos renovation or demolition project, or ACDA shall not begin until an asbestos notification of renovation and demolition form AAC-2 is received by the department, except in the case of an emergency.
- 2. Notification Requirements. Each owner or operator of a demolition, renovation, response action or ACD activity to which this Subsection applies shall:
- a. provide the Office of Environmental Services with typed notice of intention to demolish, renovate, conduct a response action, or an ACDA by completing and submitting the latest version of notification of demolition and renovation and asbestos-contaminated debris activity form, AAC-2, and fees, if applicable. This form is available from the Office of Environmental Services or through the department's website. Delivery of the notice by U.S. Postal Service, commercial delivery service, hand delivery, or email is acceptable. The use of a prior version of the AAC-2 form is acceptable unless the department has previously provided the owner/operator with notice of or a copy of the current version, or the owner/operator is aware of the latest version.
- i. After review of the notification, if the application is incomplete, inaccurate, or the fee is not submitted, a response shall be faxed or emailed to the company indicating the application is incomplete, and processing will be discontinued until all applicable information is completed and submitted to DEQ.
- ii. Any unauthorized renovation, demolition, or ACDA project, including those not processed due to incompleteness or inaccurate information on Form AAC-2 is a violation of this Section.

- b. Update by highlighting or circling revisions on, a revised Form AAC-2, as necessary, (i.e., when the amount of asbestos affected changes by plus or minus 20 percent) and indicate revised total amount of the entire project in cubic yards, or if there is a change in transporter, contractor, or designated landfill.
 - c. Postmark or deliver the notice as follows:
- i. at least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge, or similarly disturb asbestos material), if the activity is a demolition or renovation of a facility where RACM is present as described in Subparagraphs F.1.a and e (except Clauses F.1.e.ii [nonscheduled operations] and iii [emergency operations]) of this Section;
- ii. at least five working days before demolition begins, if a facility is being demolished where RACM is below threshold levels as provided in Subparagraph F.1.b of this Section;
- iii. as early as possible before, but not later than the following working day, when the facility is being demolished under an order issued by a state or local government agency because the facility is structurally unsound and in danger of imminent collapse, according to Subparagraph F.1.c of this Section, or if the operation is an emergency renovation described in Clause F.1.e.iii of this Section;
- iv. at least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in Clause F.1.e.ii of this Section;
- v. for activity covered by Subsection F (except Clauses F.1.e.ii and iii), that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the DEQ as follows:
- (a). when activity covered by Subsection F will begin after the date contained in the notice (AAC-2 form):
- (i). notify the DEQ regional office responsible for inspecting the project site of the new start date by fax or email as soon as possible before the original start date; and
- (ii). provide the Office of Environmental Services with a revised AAC-2 form of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by U.S. Postal Service, commercial delivery service, fax, email, or hand delivery is acceptable;
- (b). when the activity covered by Subsection F will begin on a date earlier than the original start date, submit a revised AAC-2 form with the new start date. The revised notice shall meet the requirements of Subparagraph F.2.c; and
- (c). in no event shall an operation covered by this Subsection begin on a date other than the date contained in the written notice (AAC-2) of the new start date.

vi. Notify the DEQ regional office by fax or email three days prior to the start of the removal of *resilient floor covering*, as defined in Subsection B of this Section, by using dry ice, heat, wet methods, and chemicals where the tiles or sheeting are removed intact or asbestos-containing mastic removed by chemical or other means that results in the asbestos fibers in the ACWM being bound within a macro substrate and cannot reasonably become airborne unless forces are applied when required by Subparagraph F.1.j.

d. In the notice include:

- i. an indication of whether the notice is the original, additional, emergency, revised (including canceled), or nonscheduled maintenance operation (annual) notification, the number of ADVFs requested, and/or note if the structure is being demolished under an order of a state or local government agency;
- ii. name, address, telephone number, and email address of a contact person of both the facility owner and operator and the asbestos removal contractor owner or operator, with the current DEQ identification number assigned by the administrative authority;
- iii. type of operation—demolition, renovation, response action, or ACDA;
- iv. a description of the facility or affected part of the facility including the size (square feet, linear feet, and number of floors), age, and present and prior use of the facility;
- v. the procedure, including analytical methods, employed to detect the presence of RACM and category I and category II nonfriable ACM, or check the "Known or Assumed" box if assumed to be asbestos and no analytical data is provided;
- vi. estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear feet, surface area in square feet on other facility components, or volume in cubic feet if off the facility components. Also, estimate the approximate amount of category I and category II nonfriable ACM in the affected part of the facility that will not be removed before the demolition. In the case of asbestos-contaminated debris pile(s), estimate the approximate total volume of the debris to be disposed. Total volume of all RACM and ACD shall be documented in cubic yards;
- vii. location and street address (including building number or name and floor or room number, if appropriate), city, parish, and state, of the facility being demolished, renovated, or for ACDA;
- viii. scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition, renovation, or ACDA; planned renovation operations involving individual nonscheduled operations shall include the beginning and

- ending dates of the annual report period as described in Clause F.1.e.ii of this Section;
- ix. scheduled starting and completion dates of demolition, renovation, response action, or ACDA;
- x. description of planned demolition, renovation work, response action, or ACDA to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components;
- xi. description of work practices and engineering controls to be used to comply with the requirements of this Section, including asbestos removal and waste handling emission control procedures;
- xii. name, telephone number, mailing address, and physical location of the RAL where the asbestos-containing waste material will be deposited;
- xiii. a signed certification that personnel performing the demolition or renovation activity, response action, or ACDA are trained and accredited as required by Subparagraph F.3.h of this Section when RACM is present;
- xiv. for demolitions where RACM is below threshold levels as provided in Subsection F.1.b of this Section, a signed certification stating that RACM is below threshold levels;
- xv. for facilities demolished under an order of a state or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, the name, title, and authority of the state or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification;
- xvi. for emergency renovations, including emergency renovation operations of an estimated amount of RACM to be removed or stripped as a result of a sudden, unexpected event that necessitated the renovation, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden;
- xvii. description of procedures to be followed in the event that unexpected RACM is found or category II nonfriable ACM becomes RACM:
- xviii. name, mailing address, telephone number, and DEQ identification number of the solid waste transporter(s) carrying the waste to the RAL and offsite/temporary storage area; and
- $\,$ xix. $\,$ current ADVF numbers if they have been issued for the project;
- e. for emergencies, provide notification by phone, fax, email, or voice mail to the Office of Environmental Services and DEQ regional office responsible for inspecting the project site as soon as possible, but in no case later than four hours after learning of the incident that required

- emergency response action, demolition or renovation operations:
- i. the emergency notification shall include the following:
 - (a). the reason for the emergency;
- (b). steps taken to minimize hazards to workers and the public; and
- (c). estimated quantities of friable and nonfriable ACM to be handled;
- ii. within five working days after the emergency notification is made, a typed AAC-2 form together with required fees as specified in Subparagraphs F.2.a and d of this Section shall be submitted to the Office of Environmental Services;
- f. use the following procedures in order that the department can trace disposal of ACWM:
- i. each properly completed and submitted demolition, renovation, response action, or ACDA notification received by the department that is associated with a project that generates asbestos-containing waste material shall result in issuance of an ADVF with a specific ADVF project number to the owner/operator. The ADVF, or a copy, shall be kept at the facility, except as provided in Subparagraph F.1.1 of this Section, and available for inspection by the department during demolition, renovation, response action, and ACDA. Alterations of the ADVF shall invalidate the ADVF;
- ii. the owner or operator of a demolition, renovation, response action, or ACDA shall complete and sign their portion of the valid ADVF, including the quantity shipped in cubic yards, the date the project is scheduled to be completed (or has been completed as applicable), printed name, signed and dated certification, and relinquish the valid ADVF to the waste transporter prior to the off-site shipment;
- iii. the waste transporter shall transport the asbestos-containing waste material with the ADVF to a RAL and complete name, dates received and delivered, sign the transporter portion, then relinquish the ADVF to the RAL site owner or operator at the time the asbestos waste is delivered for burial;
- iv. upon receipt from the transporter, the RAL owner or operator shall verify the ADVF, enter the date received, indicate the quantity received in cubic yards, print and sign the disposal facility portion of the ADVF, and mail the original ADVF to the Office of Environmental Services within 30 working days. A copy of the valid ADVF is to be returned to the waste generator within 30 working days;
- v. the ADVF shall expire 90 days from the date of issue. ADVFs for nonscheduled operations shall expire on December 31 of the year for which they are issued;
- vi. the ADVF shall be completed in its entirety by the applicable person as indicated in the particular section of the form. Information entered onto the form must be legible;

- vii. acceptance of an invalid ADVF by a contractor, waste transporter, or disposal site owner or operator is a violation of this Subchapter; and
- viii. all ADVFs that are not used shall be returned by the owner/operator to the Office of Environmental Services within 30 working days after expiration.
- 3. Procedures for Asbestos Emission Control. Each owner or operator of a demolition, renovation, response action, or ACD activity to whom this Section applies, according to Paragraph F.1 of this Section, shall maintain the ADVF or a copy on-site, except for the provisions in Subparagraph F.1.l of this Section and comply with the following procedures
- a. Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:
- i. it is category I nonfriable ACM that is not in poor condition and has a low probability that it will become RACM;
- ii. it is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition;
- iii. it was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any ACD shall be treated as ACWM and adequately wet at all times until disposed of; and
- (a). the RACM and any ACD shall be adequately wet, and contained in leak-tight, clear transparent wrapping; and
- (b). the leak-tight, clear transparent wrapping shall be sealed and labeled according to Clause J.1.a.iv of this Section during all loading and unloading operations, transportation, and during storage;
- iv. it is category II nonfriable ACM and the probability is low that the materials will become RACM.
- b. When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:
- i. adequately wet all RACM exposed during cutting or disjoining operations; and
- ii. carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding or otherwise damaging them or disturbing the RACM.
- c. When RACM is removed during a response action or stripped from a facility component while it remains in place in the facility, adequately wet the RACM prior to and during the response action or the stripping operation. The *work area controls* as defined in Subsection B of this Section shall be employed to prevent the release of ACM to

the outside air, and the controlled work area shall, when feasible, be visible to inspectors outside the work area (i.e., transparent window which is easily accessible).

- i. In renovation operations, wetting is not required only if:
- (a). the owner or operator has obtained prior written approval from the administrative authority based on a written application that wetting, to comply with Subsection F of this Section, would unavoidably damage equipment or present a safety hazard; and
- (b). the owner or operator uses one or more of the following emission control methods as approved by the administrative authority:
- (i). a local exhaust ventilation and collection (HEPA filter) system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements of Subsection O of this Section;
- (ii). a glove-bag system designed and operated to capture the particulate asbestos material produced by the stripping of the asbestos materials; and
- (iii). leak-tight clear transparent wrapping to contain all RACM prior to dismantlement.
- ii. In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in Clause F.3.c.i of this Section cannot be used, another method may be used after obtaining written approval from the administrative authority based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in Clause F.3.c.i of this Section.
- iii. A copy of the administrative authority's written approval referenced in Subclause F.3.c.i.(a) and Clause F.3.c.ii of this Section shall be kept at the worksite and made available for inspection.
- d. After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to Subparagraph F.3.b of this Section, it shall be stripped or contained in leak-tight, clear, transparent wrapping, except as described in Subparagraph F.3.e of this Section. If stripped:
 - i. adequately wet RACM during stripping; and
- ii. use a local exhaust ventilation and containment with a collection (HEPA filter) system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in Subsection O of this Section.
- e. For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which shall be handled in accordance with Subparagraphs

- F.3.b, c, and d of this Section), the RACM is not required to be stripped if the following requirements are met:
- i. the component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM;
- ii. the component is encased in a leak-tight, clear, transparent wrapping; and
- iii. the leak-tight, clear, transparent wrapping is labeled according to Clause J.1.a.iv of this Section during all loading and unloading operations, transportation, and during storage.
- f. For all RACM, including material that has been removed or stripped:
- i. adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with Subsection J of this Section;
- ii. carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material;
- iii. transport the material to the ground via leaktight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections;
- iv. RACM contained in leak-tight, clear, transparent wrapping that has been removed in accordance with Subclause F.3.c.i.(a) of this Section need not be wetted provided written authorization from the administrative authority is maintained on site during this exception to the wetting requirements.
- g. When the temperature at the point of wetting is below 0° C (32°F) and written authorization has been approved by the administrative authority as specified in Subclause F.3.c.i.(a) of this Section.
- i. The owner/operator need not comply with Clause F.3.b.i of this Section and the wetting provisions of Subparagraph F.3.c of this Section, provided written authorization from the administrative authority is maintained on-site during this exception to the wetting requirements.
- ii. The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.
- iii. During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each work day and keep daily temperature records available for inspection by the administrative authority during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least two years.

h. Personnel and Accreditation

- i. No demolition or renovation activity that disturbs RACM or ACDA shall be conducted at a facility regulated by this Subsection unless at least one asbestos abatement contractor/supervisor trained in accordance with Subsection P of this Section is physically present.
- ii. All asbestos abatement workers who are performing demolition or renovation activity that disturbs RACM or ACDA shall be trained in accordance with Subsection P of this Section and supervised by a trained asbestos contractor/supervisor.
- iii. Contractor/supervisors and workers employed by a contractor licensed by the Louisiana State Licensing Board and performing demolition or renovation activity that disturbs RACM or ACDA shall be accredited in accordance with Subsection P of this Section.
- iv. Evidence of the required training or accreditation shall be made available for inspection by the administrative authority at the demolition or renovation site. Evidence of required training or accreditation shall include, but not be limited to, the appropriate training certificates, DEQ-issued identification card or accreditation certificates. For contracted abatement personnel, evidence of accreditation shall be made available for inspection by the administrative authority at the demolition, renovation, response action, or ACDA site.
- i. For facilities described in Subparagraph F.1.c of this Section, adequately wet the portion of the facility that contains RACM during the wrecking operation.
- j. If a facility or residential structure is demolished by intentional burning, including activities related to the training of fire personnel, testing firefighting materials, or equipment, all RACM including category I and category II nonfriable ACM shall be removed in accordance with this Section before burning.
- k. There shall be no discharge of asbestos contaminated liquids from the demolition, renovation, response action, or ACDA which are contaminated with asbestos material if it is reasonably anticipated that such asbestos may become airborne.
- l. Prior to completion of a renovation, demolition, ACDA, or response action involving RACM, the work area (described area where the renovation, demolition, response action, or ACDA occurs) shall be cleaned by:
- i. removing all loose debris in and adjacent to the immediate work area whether or not it is RACM; and
- ii. encapsulating all remaining RACM in the immediate work area when feasible with a nonwhite pigmented (opaque) encapsulant which is compatible with the contacted surface.
- m. Within 24 hours after the demolition, renovation, response action, or ACDA has ended and the work area has been cleaned in accordance with Subparagraph F.3.1 of this Section, notify by fax or email the DEQ regional office responsible for inspecting the project site of the conclusion

- of the cleanup. Only after the DEQ has been notified of project completion will the abatement activity be complete.
- n. After completion of a demolition activity, where no load-supporting structural member of a facility is left, no asbestos-containing floor covering or asbestos-containing mastic shall remain on surfaces where the material has the potential to become RACM.
- G. Standard for Spraying. The owner or operator of an operation in which asbestos-containing materials are spray applied shall comply with the following requirements.
- 1. For spray-on application on buildings, structures, pipes, and conduits, do not use material containing more than one percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy, except as provided in Paragraph G.3 of this Section.
- 2. For spray-on application of materials that contain more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, polarized light microscopy, on equipment and machinery, except as provided in Paragraph G.3 of this Section.
- a. Notify the Office of Environmental Services at least 20 days before beginning the spraying operation. Include the following information in the notice:
- i. name, address and telephone number of owner or operator of a demolition or renovation activity;
 - ii. location of spraying operation; and
- iii. procedures to be followed to meet the requirements of Paragraph G.2 of this Section.
- b. Discharge no visible emissions to the outside air from spray-on application of the asbestos-containing material or use methods specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.
- 3. The spray-on application of materials in which the asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and which are not friable after drying is exempted from the requirements of Paragraph G.1 and Subparagraph G.2.b of this Section.
- 4. Sources subject to this Chapter are exempt from all requirements of LAC 33:III.Chapter 51.Subchapter A, except that the provisions regarding availability of information, LAC 33:III.5107.C, shall apply.
- H. Standard for Insulating Materials. No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this Subsection do not apply to spray-applied insulating materials regulated under Subsection G of this Section.

- I. Standard for Waste Disposal for Asbestos Mills. Each owner or operator of any source covered under the provisions of Subsection C of this Section shall:
- 1. deposit all asbestos-containing waste material at a waste disposal site recognized by the department. A completed AAC-7 Form shall have been submitted to the Office of Environmental Services by the disposal facility for prior recognition. Updated information will be required upon request. The latest AAC-7 Form may be obtained from the Office of Environmental Services or through the department's website. The Office of Environmental Services will maintain a current list of recognized asbestos waste disposal sites;
- 2. discharge no visible emissions to the outside air from the transfer of waste from asbestos control devices to the tailings conveyor, or use the methods specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air. Dispose of the waste from asbestos control devices in accordance with Paragraph J.1 or 3 of this Section;
- 3. discharge no visible emissions to the outside air during the collection, processing, packaging, or on-site transporting of any asbestos-containing waste material, or use one of the disposal methods specified in Subparagraph I.3.a or b of this Section, as follows:
 - a. use a wetting agent as follows:
- i. adequately mix all asbestos-containing waste material with a wetting agent recommended by the manufacturer of the agent to effectively wet dust and tailings, before depositing the material at a waste disposal site. Use the agent as recommended for the particular dust by the manufacturer of the agent;
- ii. discharge no visible emissions to the outside air from the wetting operation or use the methods specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;
- iii. wetting may be suspended with written authorization from the administrative authority when the ambient temperature at the waste disposal site is less than 9.5°C (15°F) as determined by an appropriate measurement method with an accuracy of ± 1 °C (± 2 °F). During periods when wetting operations are suspended, the temperature shall be recorded at least at hourly intervals, and records must be retained for at least two years in a form suitable for inspection;
- b. use an alternative emission control and waste treatment method that has received prior written approval by the administrative authority. To obtain approval for an alternative method, a written application must be submitted to the Office of Environmental Services demonstrating that the following criteria are met:
- i. the alternative method will control asbestos emissions equivalent to currently required methods;

- ii. the alternative method is suitable for the intended application;
- iii. the alternative method will not violate other regulations; and
- iv. the alternative method will not result in increased water pollution, land pollution, or occupational hazards:
- 4. when waste is transported by vehicle to a disposal site:
- a. mark vehicles used to transport ACWM during the loading and unloading of waste so that the signs are visible. The markings shall:
- i. be displayed in such a manner and location that a person can easily read the legend and;
- ii. conform to the requirements for signs specified in 29 CFR 1910.145(d)(4); and
- iii. display warning signs and labels with letter sizes and styles of sufficient size and contrast so as to be readily visible and legible as specified in 29 CFR 1926.1101(k)(8)(i-vi);
- b. for off-site disposal, provide a copy of the waste shipment record (ADVF) described in Subparagraph I.5.a of this Section, to the disposal site owner or operator at the same time as the ACWM arrives at the disposal site;
 - 5. for all ACWM transported off the facility site:
- a. the owner or operator shall maintain a copy of the asbestos waste shipment records, using an ADVF form, which includes the following information:
- i. the name, DEQ identification number, and physical address of the waste generator, and project location;
- ii. the quantity of the ACWM shipped in cubic yards;
- iii. the name and telephone number of the recognized asbestos disposal facility owner or operator;
- iv. the name and physical site location of the disposal facility;
- v. the date the waste was transported from the project location;
- $\label{eq:continuous} \begin{array}{c} \mbox{vi.} & \mbox{the names, DEQ identification number, and} \\ \mbox{telephone number of the transporter(s); and} \end{array}$
- vii. a certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations;
- b. for waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the

owner or operator of the designated disposal site to determine the status of the waste shipment;

- c. report in writing to the Office of Environmental Services if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:
- i. a copy of the waste shipment record for which a confirmation of delivery was not received; and
- ii. a cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts;
- d. retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least two years;
- 6. furnish upon request, and make available for inspection by the administrative authority, all records required under this Section.
- J. Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, Major Fiber Release Episodes, ACDA, Response Actions, and Spraying Operations. Each owner or operator of any source covered under the provisions of Subsection E, F, or G of this Section shall comply with the following provisions.
- 1. Discharge no visible emissions to the outside air during collection, processing (including incineration), packaging, or transporting or deposition of any asbestoscontaining waste material generated by the source, and use one of the emission control and waste treatment methods specified in Subparagraphs J.1.a-d of this Section. The ACWM shall be maintained as intact as practicable. The ACWM shall not be needlessly fragmented or crushed.
- a. Adequately wet and store asbestos-containing waste material as follows:
- i. mix waste from asbestos control devices to form a slurry; adequately wet other asbestos-containing waste material:
- ii. discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;
- iii. after wetting, seal all asbestos-containing waste material in leak-tight, clear, transparent containers (i.e., bags) while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight, clear, transparent wrapping, ensuring that the ACWM is securely wrapped and sealed. If utilizing plastic drums to contain ACM, the transparent wrapping requirement is not necessary. If drums are used to store bagged material, the bags must be transparent;

- iv. label the containers or wrapped materials specified in this Subsection using warning labels specified by the Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) asbestos construction standard, 29 CFR 1926.1101(k)(8)(i)-(vi). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible;
- v. for asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated; and
- vi. store all wrapped and contained asbestos-containing waste material in a labeled, secured area away from the public, where it will not be subject to disturbance or tampering until it can be transported to a recognized asbestos landfill (RAL). Disposal of ACWM shall comply with any other applicable requirements, including but not limited to appropriate hazardous waste (LAC 33:V) and solid waste (LAC 33:Part VII) regulations. In particular:
- (a). RACM shall not be disposed in a Louisiana type III (construction and demolition) landfill or processed in a composting facility;
- (b). Louisiana landfills accepting ACWM shall be properly permitted or authorized under appropriate regulations and recognized pursuant to this Section to accept the waste;
- (c). disposal of ACWM in an out of state landfill shall be in an RAL, as defined in this section and authorized by that state's authority to accept ACWM.

[NOTE: Although landfills are permitted to accept asbestos wastes, a landfill should be contacted prior to transport to the solid waste facility to verify that the ACWM will be accepted and whether the facility has other requirements prior to disposal at that location.]

- b. Process asbestos-containing waste material into nonfriable forms as follows:
- i. form all asbestos-containing waste material into nonfriable pellets or other shapes; and
- ii. discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by Subsection O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.
- c. For facilities demolished where the RACM is not removed prior to demolition according to Clauses F.3.a.i, ii, iii, and iv of this Section or for facilities demolished according to Subparagraph F.1.c or d of this Section, avoid crushing the ACM and adequately wet asbestos-containing waste material at all times prior to, during, and after demolition and keep wet during handling, storage, and loading for transport to a disposal site. The ACWM shall be maintained as intact as practicable. The ACWM shall not be needlessly fragmented or crushed. Asbestos-containing waste materials covered by this Subparagraph shall be sealed

in leak-tight containers or leak-tight, clear transparent wrapping then transported and disposed of at a solid waste Type I or Type II or hazardous waste landfill authorized to accept RACM.

- d. Use an alternative emission control and waste treatment method that has received prior written approval by the administrative authority according to the procedure described in Subparagraph I.3.b of this Section.
- e. As applied to demolition and renovation, the requirements of Paragraph J.1 of this Section do not apply to Category I and Category II nonfriable ACM waste that did not become RACM prior to or during the course of removal, storage, transportation, and disposal.
- 2. All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:
- a. a waste disposal site operated in accordance with the provisions of Subsection N of this Section; or
- b. an approved site that converts RACM and ACWM into nonasbestos (asbestos-free) material according to the provisions of Subsection L of this Section;
- c. the requirements of Paragraph J.2 of this Section do not apply to Category I nonfriable ACM that is not RACM.
- 3. Mark vehicles used to transport ACWM during the storage, loading, and unloading of waste so that the signs are visible. The markings shall conform to the requirements in Clauses I.4.a.i, ii, and iii of this Section.
 - 4. For all ACWM transported off the facility site:
- a. the owner, operator, and transporter shall maintain waste shipment records, using an ADVF Form, and include the following information:
- i. the name of the waste generator, DEQ identification number, physical address, and telephone number of the waste generator and project location;
- ii. the name and address of the administrative authority responsible for administering the asbestos Louisiana Emission Standards for Hazardous Air Pollutants (LESHAP) program;
- iii. the approximate quantity of ACWM in cubic meters (cubic yards);
- iv. the name and telephone number of the disposal site owner or operator;
- v. the name and physical site location of the disposal site;
 - vi. the date transported;
- vii. the name, address, and telephone number of the transporter(s) and;
- viii. a certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for

transport by highway according to applicable international and government regulations;

- b. provide a copy of the waste shipment record, described in Subparagraph J.4.a of this Section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site;
- c. for waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment;
- d. report in writing to the Office of Environmental Services if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:
- i. a copy of the waste shipment record for which a confirmation of delivery was not received; and
- ii. a cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts;
- e. retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least two years.
- 5. Furnish upon request, and make available for inspection by the administrative authority, all records required under this Section.
- K. Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations. Each owner or operator of any inactive waste disposal site that was operated by sources covered under Subsection C or E of this Section and received deposits of asbestos-containing waste material generated by the sources, shall:
 - 1. comply with the following:
- a. discharge no visible emissions to the outside air from an inactive waste disposal site subject to Subsection C, E, or K of this Section;
- b. cover the asbestos-containing waste material with at least 60 centimeters (24 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material; or
- c. for inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in Subparagraphs K.1.a and b of this Section. Use the agent in the manner and frequency recommended for the particular

asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the administrative authority to use this or other equally effective dust suppression agents. For purposes of Subsection K of this Section, any used, spent, or other waste oil is not considered a dust suppression agent;

- 2. unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with Subparagraph K.1.b. of this Section:
- a. display warning signs at all entrances and along the property line of the site or along the perimeter of the sections of the site where ACWM was deposited, at intervals of 165 feet or less. The warning sign shall:
- i. be displayed in such a manner and location that a person can easily read the legend;
- ii. conform to the requirements for signs specified in 29 CFR 1910.145(d); and
- iii. display warning signs and labels using the appropriate legend with letter sizes and styles of sufficient size and contrast so as to be readily visible and legible as specified in 29 CFR 1926.1101(k)(7);
- b. the perimeter of the site shall be fenced in a manner adequate to prevent access by the general public;
- c. when requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Office of Environmental Services to determine whether a fence or a natural barrier adequately deters access by the general public;
- 3. the owner or operator may use an alternate control method that has received prior approval by the administrative authority rather than comply with the requirements of Paragraph K.1 or 2 of this Section;
- 4. notify the Office of Environmental Services in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this Section, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Office of Environmental Services at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
 - a. scheduled starting and completion dates;
 - b. reason for disturbing the waste;
- c. procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the administrative authority may require changes in the emission control procedures to be used; and

- d. location of any temporary storage site and the final disposal site;
- 5. within 60 days of a site becoming inactive and after the effective date of this Section, record, in accordance with state law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:
- a. the land has been used for the disposal of asbestos-containing waste material;
- b. the survey plot and record of the location and quantity of asbestos-containing waste material disposed of within the disposal site required in Paragraph N.6 of this Section have been filed with the administrative authority; and
- c. the site is subject to LAC 33:III.Chapter 51, Subchapter M.
- L. Standard for Operations that Convert RACM or Asbestos-Containing Waste Material into Nonasbestos (Asbestos-free) Material. Each owner or operator of an operation that converts RACM or asbestos-containing waste material into nonasbestos (asbestos-free) material shall:
- 1. obtain the prior written approval of the EPA Administrator to construct the facility. To obtain approval, the owner or operator shall provide the EPA Administrator with the following information:
- a. application to construct pursuant to LAC 33:III.5111;
- b. in addition to the requirements of LAC 33:III.5111:
- i. description of waste feed handling and temporary storage;
 - ii. description of process operating conditions;
- iii. description of handling and temporary storage of the end product; and
- iv. description of the protocol to be followed when analyzing output materials by transmission electron microscopy:
- c. performance test protocol, including provisions for obtaining information required under Paragraph L.2 of this Section;
- d. the EPA Administrator may require that a demonstration of the process be performed prior to approval of the application to construct;
- 2. conduct a start-up performance test. Test results shall include:
- a. a detailed description of the types and quantities of nonasbestos material, RACM, and asbestos-containing waste material processed, i.e., asbestos cement products, friable asbestos insulation, plaster, wood, plastic, wire, etc. Test feed is to include the full range of materials that will be encountered in actual operation of the process;

- b. results of analyses, using polarized light microscopy, that document the asbestos content of the wastes processed;
- c. results of analyses, using transmission electron microscopy, that document that the output materials are free of asbestos. Samples for analysis are to be collected as eighthour composite samples [one 200-gram (7-ounce) sample per hour], beginning with the initial introduction of RACM or asbestos-containing waste material and continuing until the end of the performance test;
- d. a description of operating parameters, such as temperature and residence time, defining the full range over which the process is expected to operate to produce nonasbestos (asbestos-free) materials. Specify the limits for each operating parameter within which the process will produce nonasbestos (asbestos-free) materials; and
 - e. the length of the test;
 - 3. during the initial 90 days of operation:
- a. continuously monitor and log the operating parameters identified during start-up performance tests that are intended to ensure the production of nonasbestos (asbestos-free) output material;
- b. monitor input materials to ensure that they are consistent with the test feed materials described during start-up performance tests in Subparagraph L.2.a of this Section;
- c. collect and analyze samples, taken as 10-day composite samples [one 200-gram (7-ounce) sample collected every eight hours of operation] of all output material for the presence of asbestos. Composite samples may be for fewer than 10 days. Transmission electron microscopy (TEM) shall be used to analyze the output materials for the presence of asbestos. During the initial 90-day period, all output materials must be stored on-site until analysis shows the material to be asbestos-free or disposed of as asbestos-containing waste material according to Subsection J of this Section;
 - 4. after the initial 90 days of operation:
- a. continuously monitor and record the operating parameters identified during start-up performance testing and any subsequent performance testing. Any output produced during a period of deviation from the range of operating conditions established to ensure the production of nonasbestos (asbestos-free) output materials shall be:
- i. disposed of as asbestos-containing waste material according to Subsection J of this Section; or
- ii. recycled as waste feed during process operation within the established range of operating conditions; or
- iii. stored temporarily on-site in a leak-tight container until analyzed for asbestos content. Any product material that is not asbestos-free shall be either disposed of as asbestos-containing waste material or recycled as waste feed to the process;
- b. collect and analyze monthly composite samples [one 200-gram (7-ounce) sample collected every eight hours of operation] of the output material. Transmission electron

- microscopy shall be used to analyze the output material for the presence of asbestos;
- 5. discharge no visible emissions to the outside air from any part of the operation, or use the methods specified by Subchapter O of this Section to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;
- 6. maintain records on-site or at another location approved by the administrative authority and include the following information:
- a. results of start-up performance testing and all subsequent performance testing, including operating parameters, feed characteristics, and analyses of output materials;
- b. results of the composite analyses required during the initial 90 days of operation under Paragraph L.3 of this Section:
- c. results of the monthly composite analyses required under Paragraph L.4 of this Section;
- d. results of continuous monitoring and logs of process operating parameters required under Paragraphs L.3 and 4 of this Section;
- e. the information on waste shipments received as required in Subsection N of this Section;
- f. for output materials where no analyses were performed to determine the presence of asbestos, record the name and location of the purchaser or disposal site to which the output materials were sold or deposited, and the date of sale or disposal; and
- g. retain records required by Paragraph L.6 of this Section for at least two years;
- 7. submit the following reports to the Office of Environmental Services:
- a. a report for each analysis of product composite samples performed during the initial 90 days of operation; and
- b. a quarterly report, including the following information concerning activities during each consecutive three-month period:
- i. results of analyses of monthly product composite samples;
- ii. a description of any deviation from the operating parameters established during performance testing, the duration of the deviation, and steps taken to correct the deviation;
- iii. disposition of any product produced during a period of deviation, including whether it was recycled, disposed of as asbestos-containing waste material, or stored temporarily on-site until analyzed for asbestos content; and
- iv. the information on waste disposal activities as required in Subchapter N of this Section;

- 8. nonasbestos (asbestos-free) output material is not subject to any of the provisions of this Subsection. Output materials in which asbestos is detected, or output materials produced when the operating parameters deviated from those established during the start-up performance testing, unless shown by transmission electron microscopy (TEM) analysis to be asbestos-free, shall be considered to be asbestos-containing waste and shall be handled and disposed of according to Subsections J and N of this Section or reprocessed while all of the established operating parameters are being met.
- M. Reporting and Recordkeeping. Any new source to which this Subchapter applies (with the exception of sources subject to Subsections D, F, G, and H of this Section), which has an initial start-up date preceding the effective date of this Subchapter, shall provide the following information to the administrative authority, postmarked or delivered, within 90 days of the effective date. In the case of a new source that does not have an initial start-up date preceding the effective date, the information shall be provided to the administrative authority, postmarked or delivered, within 90 days of the initial start-up date. Any owner or operator of an existing source shall provide the following information to the administrative authority within 90 days of the effective date of this Subchapter, unless the owner or operator of the existing source has previously provided this information to the administrative authority. Any changes in the information provided by any existing source shall be provided to the administrative authority, postmarked or delivered, within 30 days after the change. The owner or operator of any existing source to which this Section is applicable shall, within 90 days after the effective date, provide the following information to the Office of Environmental Services:
- 1. a description of the emission control equipment used for each process; and
 - 2. if a fabric filter device is used to control emissions:
- a. the airflow permeability in m³/min/m² (ft³/min/ft²) if the fabric filter device uses a woven fabric; and if the fabric is synthetic, whether the fill yarn is spun or not spun; and
- b. if the fabric filter device uses a felted fabric, the density in g/m^2 (oz/yd²) the minimum thickness in millimeters (inches), and the airflow permeability in $m^3/min/m^2$ (ft³/min/ft²);
- 3. if a HEPA filter is used to control emissions, the filter efficiency shall be certified by the manufacturer to be capable of trapping and retaining 99.97 percent of all particles larger than 0.3 microns;
- 4. for sources subject to Subsections I and J of this Section:
- a. a brief description of each process that generates asbestos-containing waste material;
- b. the average volume of asbestos-containing waste material disposed of, measured in yd³/day;

- c. the emission control methods used in all stages of waste disposal; and
- d. the type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site;
- 5. for sources subject to Subsections K and N of this Section:
 - a. a brief description of the site; and
- b. the method or methods used to comply with the standard, or alternative procedures to be used;
- 6. the information required by Subsection M of this Section shall accompany the information required by LAC 33:III.5107.A and B. Active waste disposal sites subject to Subsection N of this Section shall also comply with Subsection M of this Section using the AAC-7 Form. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of LAC 33:III.5107.A and B.
- N. Standard for Active Waste Disposal Sites. Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under Subsections I, J and L of this Section shall meet the requirements of this Subsection.
- 1. There shall be no visible emissions to the outside air from any active waste disposal site where asbestoscontaining waste material has been deposited.
- 2. Unless a natural barrier adequately deters access by the general public, warning signs and fencing shall be installed and maintained as follows.
- a. Warning signs shall be displayed at all entrances, and along the property line of the site or along the perimeter of the sections of the site where ACWM is deposited, at intervals of 165 ft or less. The warning signs shall:
- i. be posted in such a manner and location that a person may easily read the legend;
- ii. conform to the requirements for signs specified in 29 CFR 1910.145(d); and $\,$
- iii. display warning signs and labels using the appropriate legend with letter sizes and styles of sufficient size and contrast so as to be readily visible and legible as specified in 29 CFR 1926.1101(k)(7).
- b. The perimeter of the disposal site shall be fenced in a manner adequate to deter access by the general public.
- c. The administrative authority will, upon request and supply of appropriate information, determine whether a fence or natural barrier adequately deters access by the general public.
- 3. At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

- a. be covered with at least 6 inches of compacted nonasbestos-containing waste material; or
- b. be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion, if previously approved by the Department of Environmental Quality. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior written approval by the administrative authority. For purposes of this Subsection, any used, spent, or other waste oil is not considered a dust suppression agent.
- 4. Rather than meet the no visible emission requirement of Paragraph N.1 of this Section, use an alternative emissions control method that has received prior written approval by the administrative authority according to the procedures of Subparagraph I.3.b of this Section.
- 5. For all ACWM received, the owner or operator of the active waste disposal site shall:
- a. maintain waste shipment records using the ADVF form and including the following information:
- i. the name, address, and telephone number of the waste generator;
- ii. the name, DEQ identification number, address, and telephone number of the transporter(s);
- iii. the quantity of ACWM in cubic yards and date received;
- iv. the presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the administrative authority identified in the ADVF, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the ADVF along with the report; and
 - v. the date buried;
- b. as soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed ADVF to the waste generator and to the Office of Environmental Services;
- c. upon discovering a discrepancy between the quantity of waste designated on the ADVF and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the Office of Environmental Services. Describe the discrepancy and attempts to reconcile it, and submit a copy of the ADVF with the report:
- d. retain a copy of all records and reports required by Subsection N of this Section for at least two years.
- 6. Maintain, until closure, records of the location, depth and area, and quantity in cubic yards of ACWM within the disposal site on a map or diagram of the disposal area.

- 7. Upon closure, comply with all the provisions of Subsection K of this Section.
- 8. Submit to the Office of Environmental Services, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.
- 9. Furnish upon request, and make available during normal business hours for inspection by the administrative authority, all records required under this Subsection.
- 10. Notify the Office of Environmental Services, in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date shall be provided to the administrative authority at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
 - a. scheduled starting and completion dates;
 - b. reason for disturbing the waste;
- c. procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the administrative authority may require changes in the emission control procedures to be used; and
- d. location of any temporary storage site and the final disposal site.
- O. Air-Cleaning. If air-cleaning is elected, as permitted by Paragraphs C.1 and E.2, Division F.3.c.i.(b).(i), Subparagraph F.3.d, Clause F.3.d.ii, Subparagraph G.2.b, Paragraph I.2 and Clause I.3.a.ii, Clauses J.1.a.ii and b.ii, and Paragraph L.5 of this Section, the requirements of this Subsection shall be met.
- 1. Use fabric filter collection devices, except as noted in Subparagraphs O.4.a and c of this Section, by doing all of the following:
- a. operating the fabric filter collection devices at a pressure drop of no more than 0.995 kilopascal (4 inches of water gage), as measured across the filter fabric;
- b. ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 $\rm m^3/min/m^2$ (30 $\rm ft^3/min/ft^2)$ for woven fabrics or $\rm 11^3/min/m^2$ (35 $\rm ft^3/min/ft^2)$ for felted fabrics, except that 12 $\rm m^3/min/m^2$ (40 $\rm ft^3/min/ft^2)$ for woven and 14 $\rm m^3/min/m^2$ (45 $\rm ft^3/min/m^2)$ for felted fabrics is allowed for filtering air from asbestos ore dryers;
- c. ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (1/16 inch) thick throughout; and
- d. avoiding the use of synthetic fabrics that contain fill yard other than that which is spun.

- 2. Properly install, use, operate, and maintain all aircleaning equipment authorized by this Section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.
- 3. For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.
- 4. The following are exceptions to Paragraph O.1 of this Section.
- a. After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the administrative authority determines that a fabric filter is not feasible, the administrative authority may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gauge pressure).
- b. Use a HEPA filter that is certified to be at least 99.97 percent efficient for particles larger than 0.3 microns.
- c. The administrative authority may authorize the use of filtering equipment other than that described in Paragraphs O.1 and 4 of this Section if the owner or operator demonstrates to the administrative authority's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.
 - P. Training and Accreditation Requirements

1. Asbestos Discipline

- a. Worker. A person required by this Section to be trained as a worker shall comply with Subsections B, C, and D of LAC 33:III.2799.Appendix A—Agent Accreditation Plan, in order to perform response actions, operations and maintenance, demolition or renovation activities that disturb RACM, and ACDA in a facility as required by this Section.
- b. Contractor/Supervisor. A person required by this section to be trained as a contractor/supervisor-shall comply with Subsections B, C, and D of LAC 33:III.2799, Appendix A—Agent Accreditation Plan, in order to supervise response actions, operations and maintenance, and demolition or renovation activities that disturb RACM, and ACDA in a facility as required by this Section.
- c. Inspector. A person shall be accredited as an inspector in accordance with LAC 33:III.2799, Appendix A—Agent Accreditation Plan in order to inspect for asbestos materials in facilities regulated by this Section.
- d. Air Monitor Personnel. A person shall be accredited as an asbestos contractor/supervisor in accordance with LAC 33:III.2799, Appendix A—Agent Accreditation Plan to conduct air monitoring for an asbestos abatement project or related activity in facilities regulated by this Section.
- 2. Contracted Personnel. When RACM is disturbed in any manner, including removal, encapsulation, enclosure, maintenance, or repairs by contracted personnel, those persons shall be accredited by DEQ in accordance with LAC

33:III.2799, Appendix A—Agent Accreditation Plan in one of the applicable disciplines: worker, contractor/supervisor, inspector, and air monitor.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

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